



Canadian Urban Environmental Health Research Consortium

CANUE Metadata Canadian Active Living Environments

November 15, 2018

DATA SET INFORMATION

Data Set Title: **Canadian Active Living Environments (Can-ALE)**

Description: The Canadian Active Living Environments (Can-ALE) database is a geographic-based set of measures that represents the active living friendliness of Canadian communities. The primary envisioned use for Can-ALE is research and analysis of the relationship between the way communities are built and the physical activity levels of Canadians. Each of the measures was selected from fourteen potential measures identified by a literature review. Several considerations were weighed in deriving the Canada-wide set of measures, including: (1) the suitability of each measure across different Canadian regions and built areas (e.g., urban, suburban, rural areas); (2) the incorporation of high-quality, open and free-to-use data sources; and (3) the strength of the association between the derived measures with walking rates and active transportation (i.e., walking, cycling, and public transit use). Public transit use is included in the definition of active transportation, as public transit is shown to generate physical activity via walking to and from transit stops.

The Can-ALE data were developed by Dr. Nancy Ross, Thomas Herrmann and William Gleckner, with funding from the Public Health Agency of Canada. Can-ALE measures have been developed for 2006 and 2016 census dissemination areas. Users are discouraged from performing longitudinal analyses using data from both the 2006 and 2016 datasets, as the derivation methodologies and census geographies changed between the reference years.

ArcGIS was used by CANUE staff to associate the single link DMTI Spatial postal codes to the Statistics Canada dissemination areas boundary files, and then join the Access to Employment data to the postal codes, using dissemination area unique identifiers. There may be many postal codes within a single dissemination area - these will have the same index values and may not be suitable for summation, etc. Please refer to the Supporting Documentation.

Theme Keywords: neighbourhood environments, physical activity, walkability, active living environment

Place Keywords: Canada national

Data preparation date: 1/19/2018

File Names: ALE_A_06.csv; ALE_A_16.csv

File Type: Comma separated values (.csv)

Beginning Date: 2006

End Date: 2016

Sampling Frequency of Data: 10 years

Number of Data Files: 2

File Size: Each file is between 50 MB to 90 MB in size. All files total 141 MB.

Data Sources: Geo-Social Determinants of Health Research Group, Department of Geography, McGill University (Can-ALE data); DMTI Spatial Inc (postal codes); Statistics Canada (enumeration/dissemination area boundary file)

Spatial Resolution: Dissemination Areas

Detection Range or Limit: N/A

Log of Changes: November 2018 - changed column names and order to standardize 2006 and 2016 files.

Maintenance Description: Indices will be added when available



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GEOSPATIAL REFERENCE

Geographic Coverage	Canada
West Bounding Coordinate	N/A
East Bounding Coordinate	N/A
North Bounding Coordinate	N/A
South Bounding Coordinate	N/A
Geometry Type:	N/A
Point Data Source:	N/A
Coordinates have Z values:	N/A
Geographic Coordinate System:	N/A
Datum	N/A
Unit:	N/A

QUALITY ASSESSMENT


QA/QC procedures:	CANUE did not assess the quality of the Active Living Environment data. Users should review the documentation provided in the recommended citation and in the supporting documentation listed below.
Geographic Coordinate Positional Accuracy:	These metrics can be linked to the corresponding annual postal codes files for mapping and analysis purposes, using the 6-digit postal code as a unique identifier in both files. Refer to the following metadata file for additional information on opportunities for assessing the spatial representativeness of postal code locations when these metrics are linked: CANUE Metadata Postal Codes.pdf
Vertical Positional Accuracy:	N/A
Attribute Accuracy:	N/A
Data Validity :	NoData = -9999 for numeric fields and NULL for text fields
Associated Files:	N/A
Data Comment:	N/A
Data Comment:	N/A

SUPPORTING DOCUMENTATION

Additional documentation:	CanALE_UserGuide.pdf
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DATA DICTIONARY

Field Name	Description	Data Type
POSTALCODEYY	6 digit postal code with no space between the FSA and LDU. (i.e. L1R2H2)	Text
ALEY_01	Unique identifier of the dissemination area (eight digits)	Text
ALEY_02	Intersection density - number of ≥ 3 -way intersections per square kilometre in the buffer around a dissemination area centroid	Numeric
ALEY_03	Dwelling density - number of dwellings per square kilometre in the buffer around a dissemination area centroid	Numeric
ALEY_04	Z-score of the intersection density measure	Numeric
ALEY_05	Z-score of the dwelling density measure	Numeric
ALEY_06	ALE Index - sum all z-scores	Numeric
ALEY_07	ALE Class - categorical value characterizing the favourability of the ALE on a scale from 1 (very low) to 5 (very high)	Category
ALEY_08	Points of interest - number of points of interest in the buffer around a dissemination area centroid	Numeric
ALEY_09	Z-score of the points of interest measure	Numeric

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ALEYY_10	Transit stops - number of public transit stops or stations in the buffer around a dissemination area centroid	Numeric
ALEYY_11	Z-score of the transit measure	Numeric
ALEYY_12	ALE TRANSIT Index - sum of the z-score of the intersection density, dwelling density, points of interest, and transit measures	Numeric
ALEYY_13	ALE TRANSIT Class - categorical value characterizing the favourability of the ALE in CMAs on a scale from 1 (very low) to 5 (very high)	Category
DATA SET CONTACTS		
Data Support:	Contact CANUE via the email below.	
Email:	info@canue.ca	
Affiliated Organization:	CANUE (Canadian Urban Environmental Health Research Consortium)	
	Dalla Lana School of Public Health, University of Toronto	
Website:	www.canue.ca	
City:	Toronto	
Prov/State:	Ontario	
Country:	Canada	
Exposure Data Source Contact:	Nancy Ross; Thomas Herrmann	
Email:	nancy.ross@mcgill.ca ; thomas.herrmann@mail.mcgill.ca	
Phone:		
First Name:	Nancy	
Last Name:	Ross	
Affiliated Organization:	McGill University	
City:	Montreal	
Prov/State:	Quebec	
Country:	Canada	
DATA USE CONDITIONS		
Conditions of Use:	<p>The Data User is REQUIRED:</p> <ul style="list-style-type: none"> (i) to acknowledge data sources listed under Acknowledgement(s); (ii) cite the publication(s) listed under Recommended Citation(s) as the providers and source of these data when using them in support of research, analysis, operations, policy decision or any other undertaking including publication; and (iii) complete and sign the CANUE Data Use and Sharing Agreement (available at http://canue.ca/data/), in which the name and signature of the researcher/analyst who takes responsibility for ensuring all conditions are met. 	
Data Sharing Restrictions:	<p>These data files are provided solely for the purposes stated in the CANUE Data Sharing and Use Agreement and should not be re-distributed for any reason. These data also contain proprietary postal code data and may only be used for the project named in the CANUE Data Sharing and Use Agreement.</p> <p>Data can be shared only within a project team for the exclusive purposes of teaching, academic research and publishing, and/or planning of educational services in accordance to DMTI End User Agreement associated with the Spatial Mapping Academic Research Tools (SMART) Program.</p>	



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Required Citation:

Include the following references in any publications resulting from the use of these data:

[1] Ross, N., Wasfi, R., Herrmann, T., and Gleckner, W., 2018. Canadian Active Living Environments Database (Can-ALE) User Manual & Technical Document. Geo-Social Determinants of Health Research Group, Department of Geography, McGill University.

[2] CanMap Postal Code Suite v2016.3. [Computer file] Markham: DMTI Spatial Inc., 2016.

Acknowledgment:

Include the following acknowledgements:

1. Canadian Active Living Environments Index (Can-ALE), indexed to DMTI Spatial Inc. postal codes , were provided by CANUE (Canadian Urban Environmental Health Research Consortium);