Data description for the dataset *Road transport emissions and vehicle mileages in 2018 for counties, municipalities, urban areas and a 1 km² grid in North Rhine-Westphalia, Germany*

The following list contains detailed descriptions of the different attributes of the free accessible road transport emission map developed by Janos L. Breuer et al. from Forschungszentrum Jülich GmbH. The methodology behind this dataset is explained in the reference below.

As reference for usage, please use the following source:

Janos Lucian Breuer, Remzi Can Samsun, Ralf Peters, Detlef Stolten. A bottom-up approach for road transport emissions on street level: A case study in North Rhine-Westphalia, Germany. *In preparation*

Table 1 Description of the attributes

Attribute name	Description	Datatype
CCA_2	County number	String
CC_3	Municipality number	String
NAME_0	Country name (Germany)	String
NAME_1	State name (North Rhine-Westphalia)	String
NAME_2	County name	String
NAME_3	Municipality name	String
street_A	Total street length of the street category federal highway (in German: Bundesautobahn) in m.	Float
street_B	Total street length of the street category federal road (in German: Bundesstraße) in m.	Float
street_L	Total street length of the street category state road (in German: Landesstraße) in m.	Float
street_K	Total street length of the street category district road (in German: Kreisstraße) in m.	Float
street_o	Total street length of the street category other street in m.	Float
ID	Unique id	String
MC	Yearly average traffic volume of motorcycles in vehicle km.	Float
PC	Yearly average traffic volume of passenger cars in vehicle km.	Float
LDV	Yearly average traffic volume of light duty vehicles in vehicle km.	Float
BUSES	Yearly average traffic volume of buses in vehicle km.	Float
RT	Yearly average traffic volume of rigid trucks in vehicle km.	Float
TT	Yearly average traffic volume of trailer trucks in vehicle km.	Float
AT	Yearly average traffic volume of articulated trucks in vehicle km.	Float
OTHER	Yearly average traffic volume of other vehicles in vehicle km	Float
NO_x	Yearly specific nitrogen oxide (NO_x) emissions in kg/km^2.	Float
CO	Yearly specific carbon monoxide (CO) emissions in kg/km^2.	Float
HC	Yearly specific hydrocarbons (HC) emissions in kg/km^2.	Float
PM	Yearly specific particulate matter (PM) with a diameter < 10 µm emissions in kg/km^2.	Float
CO_2	Yearly specific carbon dioxide (CO_2) emissions in kg/km^2. Note: This value includes only the carbon dioxide emissions from the fossil part of the fuel without the biofuel share. Please contact the author if you are interested in total CO_2 emissions.	Float

Table 2 Description of the different vehicle classes motorcycle, passenger car, light duty vehicles, buses, rigid trucks, trailer trucks, articulated trucks and other vehicles adapted from Bast [2]

Name	Description
Motorcycles (MC)	Motorcycles with insurance disc or license number
Passenger cars (PC)	Passenger cars with and without trailer
Light duty vehicles (LDV)	Trucks with gross vehicle weight < 3.5 t without trailer, campers
Buses	Urban buses, coaches
Rigid trucks (RT)	Trucks with gross vehicle weight > 3.5 t without trailer, trucks with semitrailer for tanks without trailer, fuel tank trucks, trucks with special constructions
Trailer trucks (TT)	Trucks with gross vehicle weight > 3.5 t with trailer, trucks with semitrailer for tanks with trailer, other tractors (including tractors with tang wagon)
Articulated trucks (AT)	Articulated trucks, articulated trucks with semitrailer as fuel tank truck
Other vehicles	Agricultural tractors, remaining motor vehicles, other motor vehicles and not classified motor vehicles

1. EEA, European Environment Agency, *Urban morphological zones 2006*. 2014.
2. Bast, Bundesanstalt für Straßenwesen, *Fahrleistungserhebung 2014.* Verkehrstechnik, 2017. **Heft V 290**.