

GFSre – mapping of Polish cities

Krzysztof Węcel, Włodzimierz Lewoniewski

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Agenda

- ▶ Territorial division of Poland
- ▶ Retrieving data from BDL
- ▶ Mapping of geographical entities
- ▶ Analysis of Wikipedia and Wikidata

Territorial division of Poland

Administrative division of Poland

- ▶ https://pl.wikipedia.org/wiki/Podzia%C5%82_administracyjny_Polski
- ▶ 16 voivodships
- ▶ 380 powiats (counties), of which:
 - ▶ 66 cities having the rights of powiats
 - ▶ 314 regular powiats, collecting several gminas
- ▶ 2477 gminas (communes)
 - ▶ 302 urban gminas
 - ▶ 638 mixed gminas, i.e. includes one city/town and several villages
 - ▶ 537 rural gminas, i.e. no town/city within borders
- ▶ urban gminas – special case
 - ▶ gmina which is a city at the same time
 - ▶ there is only city within gmina boundaries
 - ▶ there are 302 such gminas (2019)
 - ▶ of which 66 have the same rights as powiat (but are not powiats)

Various available classifications

- ▶ NUTS
 - ▶ Nomenclature of Territorial Units for Statistics, a geocode standard for referencing the subdivisions of countries for statistical purposes in the European Union
- ▶ NTS
 - ▶ implementation of NUTS for Poland, valid until 2017
- ▶ KTS
 - ▶ implementation of NUTS for Poland, replacement for NTS since 2018
- ▶ TERYT
 - ▶ national registry of territorial division of Poland
 - ▶ contains:
 - ▶ TERC – identifiers and names for administrative units
 - ▶ SIMC – identifiers and names for populated places
















Various available classifications - mapping

- ▶ sample mapping between classifications

KTS			TERYT		NUTS	
10000000000000	POLSKA		-		-	
10010000000000	POŁUDNIOWY	makroregion	-		PL2	MAKROREGION POŁUDNIOWY
10011200000000	Małopolskie	województwo	12	WOJ. MAŁOPOLSKIE	-	-
10011210000000	Małopolskie	region	-		PL21	Małopolskie
10011212300000	Oświęcimski	podregion	-		PL21A	Oświęcimski
10011212312000	olkuski	powiat	1212	Powiat olkuski	-	
10011212312032	Bolestaw	gmina wiejska	121203 2	Bolestaw	-	

TERYT

- ▶ download in CSV
- ▶ http://eteryt.stat.gov.pl/eTeryt/rejestr_teryt/udostepnianie_danych/baza_teryt/uzytkownicy_indywidualni/pobieranie/pliki_pelne.aspx?contrast=default

Wersje danych:		podstawowa	adresowa	statystyczna
Dane:	TERC	 Pobierz	 Pobierz	
	SIMC	 Pobierz	 Pobierz	 Pobierz
	ULIC	 Pobierz	 Pobierz	
	NTS	 Pobierz		
	WMRODZ	 Pobierz		

TERYT – SIMC

- ▶ SIMC provides identifiers for populated places
- ▶ data available in CSV
- ▶ structure is as follows:

SIMC adresowy

WOJ.	POW	GMI	RODZ_GMI	RM	MZ	NAZWA	SYM	SYMPOD	STAN_NA
------	-----	-----	----------	----	----	-------	-----	--------	---------

96126 rows

SIMC urzędowy

WOJ.	POW	GMI	RODZ_GMI	RM	MZ	NAZWA	SYM	SYMPOD	STAN_NA
------	-----	-----	----------	----	----	-------	-----	--------	---------

In comparison to "adresowy" contains also parts/districts of cities (RM=99)

102914 rows

SIMC statystyczny

WOJ.	POW	GMI	RODZ_GMI	RM	MZ	NMST	NMSK	SYMBM	SYMSTAT	NAZWA	SYM	SYMPOD	STAN_NA
------	-----	-----	----------	----	----	------	------	-------	---------	-------	-----	--------	---------

102914 rows

In comparison to "urzędowy" contains additional columns: NMST, MNSK, SYMBM, SYMSTAT.

data model provided is not complete

http://eteryt.stat.gov.pl/eTeryt/rejestr_teryt/udostepnianie_danych/baza_teryt/uzytkownicy_indywidualni/pobieranie/pliki_pelne_struktury.aspx

TERYT - TERC

- ▶ TERC provides identifiers for administrative units
- ▶ data available in CSV
- ▶ structure is as follows:

TERC adresowy

WOJ.	POW	GMI	RODZ	NAZWA	NAZWA_DOD	STAN_NA
------	-----	-----	------	-------	-----------	---------

TERC urzędowy

WOJ.	POW	GMI	RODZ	NAZWA	NAZWA_DOD	STAN_NA
------	-----	-----	------	-------	-----------	---------

The same columns.

In comaprison to "adresowy" contains also mixed gminas urban-rural.

- ▶ meanings of RODZ
 - ▶ 1 – urban commune, 2 – rural commune, 3 – mixed commune, 4 – city in a mixed commune, 5 – rural area in mixed commune, 8 – districts of Warszawa, 9 – delegacy in cities: Kraków, Łódź, Poznań, Wrocław

TERYT - NTS

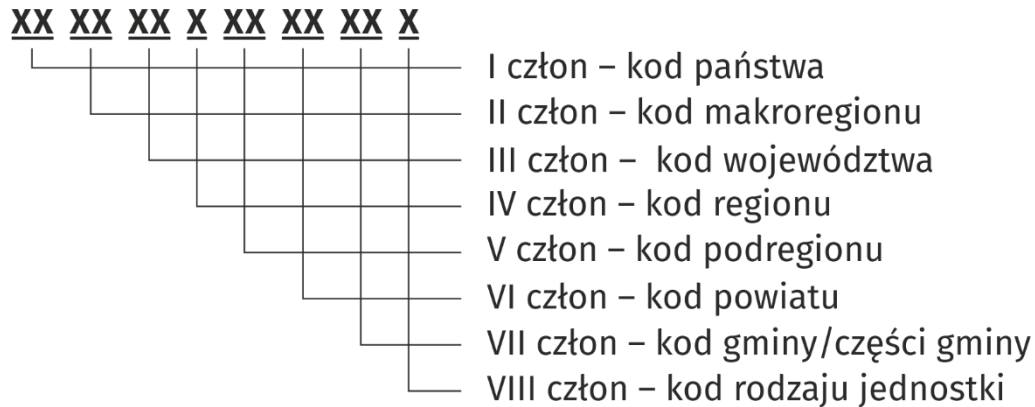
- ▶ it allows to build a mapping between TERC/SIMC and NTS
- ▶ statistical data is provided in KTS (former NTS)

NTS

POZIOM	REGION	WOJ.	PODREG	POW	GMI	RODZ	NAZWA	NAZWA_DOD	STAN_NA
--------	--------	-------------	--------	------------	------------	-------------	-------	-----------	---------

Possible mapping to TERC
 Columns in bold are common

KTS



- ▶ I (2 digits) – code for Poland (10)
- ▶ II (2 digits) – macroregion code (numbers from 01 for the southern macroregion to 07 for the macroregion Mazowieckie voivodship; the same order as in NUTS Regulation)
- ▶ III (2 digits) – voivodship code (from the TERYT register)
- ▶ IV (1 digit) – region code (for 15 voivodships - 1, in Mazowieckie voivodship 1 or 2)
- ▶ V (2 digits) – subregion code (continuous numbering for all sub-regions of the country; the order of sub-regions used in the NTS Nomenclature has been preserved: numbers from 01 to 73)
- ▶ VI (2 digits) – country (powiat) code (from the TERYT register)
- ▶ VII part (2 digits) – commune (gmina) code (from the TERYT register)
- ▶ VIII term (1 digit) – unit type code (from the TERYT register)

KTS – available data

- ▶ data is available in Excel
- ▶ ... and is really ugly

KTS 1			KTS 2			KTS 3			KTS 4			KTS 5			KTS 6			
Makroregiony Macroregions			Województwa Voivodships			Regiony Regions			Podregiony Subregions			Powiaty i miasta na prawach powiatu Powiats and cities with powiat status			Gminy Gminas			
Kod Code	Nazwa Name	Nazwa dodatkowa Additional name	Kod Code	Nazwa Name	Nazwa dodatkowa Additional name	Kod Code	Nazwa Name	Nazwa dodatkowa Additional name	Kod Code	Nazwa Name	Nazwa dodatkowa Additional name	Kod Code	Nazwa Name	Nazwa dodatkowa Additional name	Kod Code	Nazwa Name	Nazwa dodatkowa Additional name	
1001000000000	POLUDNIOWY	makroregion																
			1001120000000	Małopolskie	województwo													
						1001121000000	Małopolskie	region										
									1001121200000	Krakowski	podregion							
												1001121200100	bocheński	powiat				
															#####	Bochnia	gmina miejska	
												1001121200102			2	Bochnia	gmina wiejska	
												1001121200103			2	Drwinia	gmina wiejska	
												1001121200104			2	Lipnica Murowana	gmina wiejska	
												1001121200105			2	Lapanów	gmina wiejska	
												1001121200106			3	Nowy Wiśnicz	gmina miejsko-wiejska	
												1001121200106			4	Nowy Wiśnicz	miasto	
												1001121200106			5	Nowy Wiśnicz	obszar wiejski	
												1001121200107			2	Rzezawa	gmina wiejska	
												1001121200108			2	Trzciana	gmina wiejska	
												1001121200109			2	Żegocina	gmina wiejska	
												1001121200600	krakowski	powiat				
															1001121200601	2	Czernichów	gmina wiejska

Retrieving data from BDL

BDL – Bank Danych Lokalnych

- ▶ The Local Data Bank is Poland's largest database on the economy, society and the environment
- ▶ offers over 40.000 statistical characteristics grouped thematically
- ▶ data and indicators describe statistical towns, municipalities, counties, voivodships and Poland as well as units compliant with the NTS nomenclature: subregions and regions
- ▶ data is available in online browser and via API

DBL – statistical levels

- ▶ 0 – Poland total
- ▶ 1 – Macroregions level
- ▶ **2 - Voivodships**
- ▶ 3 – Regions level
- ▶ 4 – Subregions level
- ▶ **5 – Counties (powiat)**
- ▶ **6 – Communes (gmina)**
- ▶ 7 – Statistical town

BDL – online browser

- ▶ data can be browsed in a convenient manner by
 - ▶ by subjects
 - ▶ by territorial division units

Data as of 12th December, 2019


 Statistics Poland |
 
 BDL
 DATA ▾
METADATA ▾
API
ARCHIVE ▾
HELP ▾

Start / Data by domains

➔ Next

- ▶ AGRICULTURAL CENSUS
- ▶ AGRICULTURE, FORESTRY AND HUNTING
- ▶ CULTURE AND ART
- ▶ EDUCATION
- ▶ ENTITIES OF THE NATIONAL ECONOMY, OWNERSHIP AND STRUCTURAL TRANSFORMATIONS
- ▶ ENVIRONMENTAL PROTECTION
- ▶ EUROPEAN FUNDS (HALF YEAR DATA)
- ▶ FINANCES OF ENTERPRISES (QUARTERLY DATA)
- ▶ FUEL, ENERGY AND MATERIALS MARKET
- ▶ HEALTH CARE, SOCIAL WELFARE AND BENEFITS TO THE FAMILY
- ▶ HIGHER EDUCATION

Category

POPULATION (K3)

Group

POPULATION (G7)

Subgroup

Population in municipalities without cities with powiat status and cities with powiat status (P2914)

Years

1995-2018

Data accessibility level

Gminas

BDL – online browser

- ▶ selection of data is a process
- ▶ sometimes several dimensions are available
- ▶ nevertheless, they result in a single variable

Information selected 1 (limit 3500)

Years

2018
2017
2016
2015
2014
2013
2012

Selected: 1/24



Territorial scope

gminas without cities with powiat status
cities with rights status

Selected: 1/2



Domicile

place of residence

Selected: 1/1



As of

as of 30th June
as of 31st December

Selected: 1/2



Sex

total
males
females

Selected: 1/3



Category K3 [POPULATION](#)

Group G7 [POPULATION](#)

Subgroup P2914 [Population in municipalities without cities with powiat status and cities with powiat status](#)

Dimensions Territorial scope; Domicile; As of; Sex; Years

Last update 2019-05-29

BDL - API

- ▶ access to variables is in a hierarchical manner
- ▶ reflection of the navigation in online tool
- ▶ possible approaches:
 - ▶ single variable and multiple geographical units
 - ▶ single geographical unit and multiple variables
- ▶ steps:
 - ▶ 1. identify interesting subject
 - ▶ 2. determine variable
 - ▶ 3. download data

BDL - API

- ▶ get top-level subjects
 - ▶ <https://bd1.stat.gov.pl/api/v1/subjects?lang=pl&format=json>
- ▶ we learn sub-topics (children) and levels of data

```
1 {
2   "totalRecords": 32,
3   "page": 0,
4   "pageSize": 40,
5   "links": {
6     "first": "https://bd1.stat.gov.pl/api/v1/subjects?lang=pl&page=0&page-size=40",
7     "self": "https://bd1.stat.gov.pl/api/v1/subjects?lang=pl&page=0&page-size=40",
8     "last": "https://bd1.stat.gov.pl/api/v1/subjects?lang=pl&page=0&page-size=40"
9   },
10  "results": [
11    {
12      "id": "K15",
13      "name": "CENY",
14      "hasVariables": false,
15      "children": [
16        "G186",
17        "G187",
18        "G188",
19        "G189",
20        "G405"
21      ],
22      "levels": [
23        3
24      ]
25    },
```

BDL - API

- ▶ drill-down through the topics until some variables are found
 - ▶ <https://bd1.stat.gov.pl/api/v1/subjects?parent-id=K3>
 - ▶ <https://bd1.stat.gov.pl/api/v1/subjects?parent-id=G7>

```
1 {
2   "totalRecords": 7,
3   "page": 0,
4   "pageSize": 10,
5   "links": {
6     "first": "https://bd1.stat.gov.pl/api/v1/subjects?parent-id=K3&page=0&page-size=10",
7     "self": "https://bd1.stat.gov.pl/api/v1/subjects?parent-id=K3&page=0&page-size=10",
8     "last": "https://bd1.stat.gov.pl/api/v1/subjects?parent-id=K3&page=0&page-size=10"
9   },
10  "results": [
11    {
12      "id": "G564",
13      "parentId": "K3",
14      "name": "DANE ARCHIWALNE",
15      "hasVariables": false,
16      "children": [
17        "P1346",
18        "P1351",
19        "P1352",
20        "P1357",
21        "P1876",
22        "P1884",
23        "P2170",
24        "P2798",
25        "P2799"
26      ],
27      "levels": [
28        3,
29        5,
30        7
31      ]
32    },

```

BDL - API

- ▶ get available variables
 - ▶ <https://bd1.stat.gov.pl/api/v1/variables?subject-id=P2425>
- ▶ variables can be used directly to obtain data
 - ▶ if we know them we do not need to browse this way

```
1 {
2   "totalRecords": 3,
3   "page": 0,
4   "pageSize": 10,
5   "links": {
6     "first": "https://bd1.stat.gov.pl/api/v1/variables?subject-id=P2425&page=0&page-size=10",
7     "self": "https://bd1.stat.gov.pl/api/v1/variables?subject-id=P2425&page=0&page-size=10",
8     "last": "https://bd1.stat.gov.pl/api/v1/variables?subject-id=P2425&page=0&page-size=10"
9   },
10  "results": [
11    {
12      "id": 60559,
13      "subjectId": "P2425",
14      "n1": "\u0139\u0203a\u00c4\u2021 na 1 km\u00b2",
15      "level": 6,
16      "measureUnitId": 26,
17      "measureUnitName": "osoba"
18    },

```

BDL - API

- ▶ get data values
 - ▶ we select 60559, which is density of the population
 - ▶ <https://bd1.stat.gov.pl/api/v1/data/by-variable/60559?format=json&unit-level=6&page-size=100>
- ▶ identifiers of places are those from KTS

```
1 {
2   "totalRecords": 3809,
3   "links": {
4     "first": "https://bd1.stat.gov.pl/api/v1/data/by-variable/60559?format=json&unit-
5     "self": "https://bd1.stat.gov.pl/api/v1/data/by-variable/60559?format=json&unit-
6     "next": "https://bd1.stat.gov.pl/api/v1/data/by-variable/60559?format=json&unit-
7     "last": "https://bd1.stat.gov.pl/api/v1/data/by-variable/60559?format=json&unit-
8   },
9   "variableId": 60559,
10  "measureUnitId": 26,
11  "aggregateId": 1,
12  "lastUpdate": null,
13  "results": [
14    {
15      "id": "011212001011",
16      "name": "Bochnia",
17      "values": [
18        {
19          "year": "2002",
20          "val": 983.0,
21          "attrId": 1
22        }
23      ]
24    }
25  ]
26 }
```

What was done

- ▶ 3 Python scripts
 - ▶ get_subjects.py (1st stage)
 - ▶ get_variables.py (2nd stage)
 - ▶ get_data.py (3rd stage)
- ▶ downloaded data so far
 - ▶ 60599 – The population density and indicators, population per 1 km²
 - ▶ 2018 – Area total in square km
 - ▶ 199206 – Population in municipalities, gminas without cities with powiat status, as of 31st Dec., total
 - ▶ 199207 – Population in municipalities, cities with powiat status, as of 31st Dec., total

Mapping of geographical IDs

Wikipedia and TERYT

- ▶ TERYT is widely used in infoboxes of Polish cities
- ▶ Wikipedia seems to respect the classification provided by TERC and SIMC
- ▶ example – mixed commune
 - ▶ TERC specifies the type
 - ▶ 3 – mixed commune, 4 – city in a mixed commune, 5 – rural area in mixed commune
 - ▶ sample data about Nowy Wiśnicz
 - ▶ **12;01;06;3**;Nowy Wiśnicz;gmina miejsko-wiejska;2019-01-01
 - ▶ **12;01;06;4**;Nowy Wiśnicz;miasto;2019-01-01
 - ▶ **12;01;06;5**;Nowy Wiśnicz;obszar wiejski;2019-01-01

Wągrowiec in BDL

- ▶ by expanding the administrative division tree in BDL we obtain the following structure of Wągrowiec country
 - ▶ the codes provided here are from TERYT

▼	Powiat wągrowiecki		3028000	Powiat	1995-2019
	Wągrowiec (1)		3028011	Gmina miejska	1995-2019
	Damaslówek (2)		3028022	Gmina wiejska	1995-2019
▶	Gołańcz (3)		3028033	Gmina miejsko-wiejska	1995-2019
	Mieścisko (2)		3028042	Gmina wiejska	1995-2019
▼	Skoki (3)		3028053	Gmina miejsko-wiejska	1995-2019
	Skoki - miasto (4)		3028054	Miasto w gminie miejsko-wiejskiej	1995-2019
	Skoki - obszar wiejski (5)		3028055	Obszar wiejski w gminie miejsko-wiejskiej	1995-2019
	Wapno (2)		3028062	Gmina wiejska	1995-2019
	Wągrowiec (2)		3028072	Gmina wiejska	1995-2019

Wągrowiec in Wikipedia

- ▶ Wągrowiec as a county, city, and rural gmina

Powiat wągrowiecki	
— powiat —	
<p>Herb</p>	<p>Flaga</p>
Państwo	Polska
Województwo	wielkopolskie
TERYT	4.30.38.28.00.0
Siedziba	Wągrowiec

Położenie na mapie powiatu
wągrowieckiego
(Przełącz na mapę Polski)

Wągrowiec

52°48'25"N 17°12'25"E

TERC (TERYT)	3028011
SIMC	0967297

Wągrowiec	
— gmina wiejska —	
<p>Herb</p>	
Państwo	Polska
Województwo	wielkopolskie
Powiat	wągrowiecki
TERYT	3028072

Mixed commune – Nowy Wiśnicz

- ▶ Nowy Wiśnicz as a city
 - ▶ https://pl.wikipedia.org/wiki/Nowy_Wiśnicz
 - ▶ TERC is 1201064 as expected
 - ▶ SIMC refers to record about city



12;01;06;4;96;1;01;001;0;0824936;N
owy Wiśnicz;0824936;0824936;2019-
01-01

Mixed commune – Nowy Wiśnicz

- ▶ Nowy Wiśnicz as a commune (gmina)
 - ▶ [https://pl.wikipedia.org/wiki/Nowy_Wiśnicz_\(gmina\)](https://pl.wikipedia.org/wiki/Nowy_Wiśnicz_(gmina))
 - ▶ TERC is 1201063 as expected
 - ▶ there is no SIMC
- ▶ there is no 1201065 in Wikipedia, so the rural area do not have a separate article

 <p>Herb</p>	
Państwo	 Polska
Województwo	 małopolskie
Powiat	bocheński
TERYT	1201063
Burmistrz	Małgorzata Więckowska
Powierzchnia	82,13 km ²
Populacja (30.06.2016)	
• liczba ludności	13 808 ^[1]
• gęstość	168,1 os./km ²
Nr kierunkowy	14
Tablice rejestracyjne	KBC, KBA ^[2]

Village in a rural commune

- ▶ Motyle is a village
 - ▶ [https://pl.wikipedia.org/wiki/Motyle_\(wojew%C3%B3dztwo_dolno%C5%9Bl%C4%85skie\)](https://pl.wikipedia.org/wiki/Motyle_(wojew%C3%B3dztwo_dolno%C5%9Bl%C4%85skie))
 - ▶ SIMC 0364179 is a correct one
 - ▶ there is no TERC

02;01;03;2;01;1;06;001;0;0364179;M
 otyle;0364179;0364179;2019-01-01

Motyle	
— wieś —	
Państwo	 Polska
Województwo	 dolnośląskie
Powiat	bolesławiecki
Gmina	Gromadka
Liczba ludności (III 2011)	60 ^[1]
Strefa numeracyjna	75
Kod pocztowy	59-706
Tablice rejestracyjne	DBL
SIMC	0364179

Incorrect TERYT - Bądkowo

- ▶ sometimes identifiers are mixed and provided incorrectly
- ▶ example: commune Bądkowo
- ▶ provided number
 - ▶ 6040601052
- ▶ correct TERC
 - ▶ 0401052
- ▶ correct NTS
 - ▶ 56040801052
- ▶ correct KTS
 - ▶ 10040410801052

Bądkowo	
— <i>gmina wiejska</i> —	
	
Herb	Flaga
Państwo	 Polska
Województwo	kujawsko-pomorskie
Powiat	aleksandrowski
TERYT	6040601052
Wójt	Ryszard Stępkowski
Powierzchnia	79,7 km ²
Populacja (31.12.2017)	
• liczba ludności	4 311 ^[1]
• gęstość	54,1 os./km ²
Nr kierunkowy	54
Tablice rejestracyjne	CAL

Analysis of Wikipedia and Wikidata

Articles as a source of the names

- ▶ https://pl.wikipedia.org/wiki/Miasta_w_Polsce:
 - ▶ Section "**Lista miast w Polsce w porządku alfabetycznym**" -> subsection "**Indeks**"
 - ▶ 968 articles found

- ▶ https://pl.wikipedia.org/wiki/Lista_gmin_w_Polsce:
 - ▶ Section "**Lista gmin w Polsce**" -> subsection "**Indeks**"
 - ▶ 2477 articles found

Categories as a source of the names

- ▶ https://pl.wikipedia.org/wiki/Kategoria:Miasta_w_Polsce_wed%C5%82ug_wojew%C3%B3dztw :
 - ▶ 3 levels limit
 - ▶ 942 articles founded (including 4 articles that are lists)
- ▶ https://pl.wikipedia.org/wiki/Kategoria:Gminy_w_Polsce_wed%C5%82ug_wojew%C3%B3dztw:
 - ▶ 4 levels limit
 - ▶ 53231 articles found (including a lot of articles that describe other subjects)

Infoboxes as a source of the names

- ▶ **Polskie miasto infobox** – 940 art.
- ▶ **Polska jednostka administracyjna infobox** – 15807 art.
- ▶ **Polska miejscowość infobox** – 60970 art.
- ▶ **Wieś infobox** - 1019 art.
- ▶ **Dzielnica infobox** - 5457 art.
- ▶ **Total: 84 192 art.**
 - ▶ One of the art. has two infoboxes

Wikidata vs Wikipedia

- ▶ Out of **84 193** articles from Polish Wikipedia only 85 are not present in Wikidata. Bias can appear for one of the following reasons:
 - ▶ Wikipedia article was created recently (for example comparing to the time point when Wikidata dump was created)
 - ▶ Wikipedia article changed the title after the Wikidata dump was created

Wikidata vs Wikipedia

▶ 85 places from Polish Wikipedia which are not in Wikidata:

- | | | |
|----------------------------|--|---------------------------------------|
| ▶ Aniołów | ▶ Jezioro (powiat wierszowski) | ▶ Podlesie (Bukowno) |
| ▶ Argentyna (Zawiercie) | ▶ Kamień (Częstochowa) | ▶ Polski Koniec |
| ▶ Barnowski Młyn | ▶ Kolonia Dominów | ▶ Potoczek (Wilkowice) |
| ▶ Bałart (kolonia) | ▶ Kolonia Otocka (Grabina) | ▶ Pufferki |
| ▶ Bogucice (gmina Pińczów) | ▶ Kolonia Wólka Abramowicka | ▶ Radzice |
| ▶ Bór Biskupi | ▶ Kosiakowo | ▶ Radzimów Dolny |
| ▶ Brzezie (Krężyły) | ▶ Krzywe Błoto | ▶ Radzimów Górny |
| ▶ Brzózka (Rozpucie) | ▶ Kucelin | ▶ Raszówka (Raszówka) |
| ▶ Cegliska | ▶ Kule (Częstochowa) | ▶ Sabinów (Częstochowa) |
| ▶ Chodyłówka | ▶ Kutylowo-Skupie | ▶ Skleniec (Wilkowice) |
| ▶ Czarnawa | ▶ Leśniczówka Skrzynice | ▶ Sowa (Kazimierzewo) |
| ▶ Dąb (Jaworzno) | ▶ Lolin (Stradlice) | ▶ Starczynów |
| ▶ Dąbie (Częstochowa) | ▶ Magurka (Wilkowice) | ▶ Stare Bukowno |
| ▶ Duże | ▶ Mielno Stargardzkie | ▶ Tomaszówka (Aleksandria Krzywowska) |
| ▶ Dwór (Szwarszowice) | ▶ Mojków (powiat lubański) | ▶ Tomaszówka (Potok Wielki) |
| ▶ Gaj Chełmecki | ▶ Na Łąkach (Brodnica Górna) | ▶ Warwarówka |
| ▶ Gmina Biazków | ▶ Nowe Jabłonki | ▶ Węgrzynek |
| ▶ Gmina Czarnów | ▶ Nowe Kolonie (Gierczyce) | ▶ Wikaryjskie (Warząchewka Polska) |
| ▶ Gmina Maczków | ▶ Oracze (województwo opolskie) | ▶ Winiary (Głogówek) |
| ▶ Gmina Nowa Wioska | ▶ Osiedle Chęcińskie | ▶ Wodąca (Bukowno) |
| ▶ Gmina Połębko | ▶ Osiedle Jagiellońskie (obszar SIM) | ▶ Wólka Jabłońska |
| ▶ Gmina Sądów | ▶ Osiedle Karola Miarki | ▶ Wyczerpy Dolne |
| ▶ Gmina Tarnowice Stare | ▶ Osiedle Piastowskie (obszar SIM) | ▶ Wyczerpy Górne |
| ▶ Gmina Żabice | ▶ Osiedle Powstańców Śląskich (Pszczyna) | ▶ Zagajnik (Częstochowa) |
| ▶ Gmina Żyglin | ▶ Osiedle Rzeczypospolitej (obszar SIM) | ▶ Zastróże |
| ▶ Gnaszyn Dolny | ▶ Osiedle Wyszyńskiego (Prudnik) | ▶ Zawądródź |
| ▶ Gnaszyn Górny | ▶ Pamięcin (Walentynów) | ▶ Zawisty-Dworaki |
| ▶ Gołcewo | ▶ Paściągóra | |
| ▶ Jebramki (Cisy) | ▶ Płoszczań (Kwaczała) | |

Wikidata as a source of the names

```
SELECT ?city ?teryt WHERE {  
  ?city (wdt:P1653) ?teryt.  
}
```

- ▶ Only 2973 items with TERYT identifier was found in Wikidata
- ▶ Only 1 of them is not present in the list of 84193 articles:

Q11800167

- ▶ This item has article in Polish Wikipedia with „Osiedle mieszkaniowe infobox” (living district in the city)

Wikidata as a source of the names - 2

```
SELECT ?city ?simc WHERE {
  ?city (wdt:P4046) ?simc.
}
```

- ▶ 60947 items with SIMC identifier were found in Wikidata
- ▶ Only 27 of them are not present in the list of **84193** articles:

Q18432781	Q11733805	Q30909923
Q888872	Q16618771	Q16613042
Q16549604	Q16591107	Q6405748
Q16592257	Q16616533	Q7136526
Q18432201	Q669697	Q38745766
Q6429033	Q7107705	Q75041707
Q16619929	Q16978417	Q18426248
Q25415976	Q656330	
Q4891361	Q6430951	
Q38745768	Q9182533	

- ▶ Most of them are not described in Polish Wikipedia or at any Wikipedia language

Additional sources

- ▶ Polish counties by TERYT code
 - ▶ https://pl.wikisource.org/wiki/Polskie_powiaty_wed%C5%82ug_kodu_TERYT
- ▶ Polish gminas by TERYT code
 - ▶ https://pl.wikisource.org/wiki/Polskie_gminy_wed%C5%82ug_kodu_TERYT
- ▶ Plate numbers by powiat
 - ▶ https://pl.wikisource.org/wiki/Polskie_tablice_rejestracyjne