

‘PopulationFromWikidata’

Lua module for place articles

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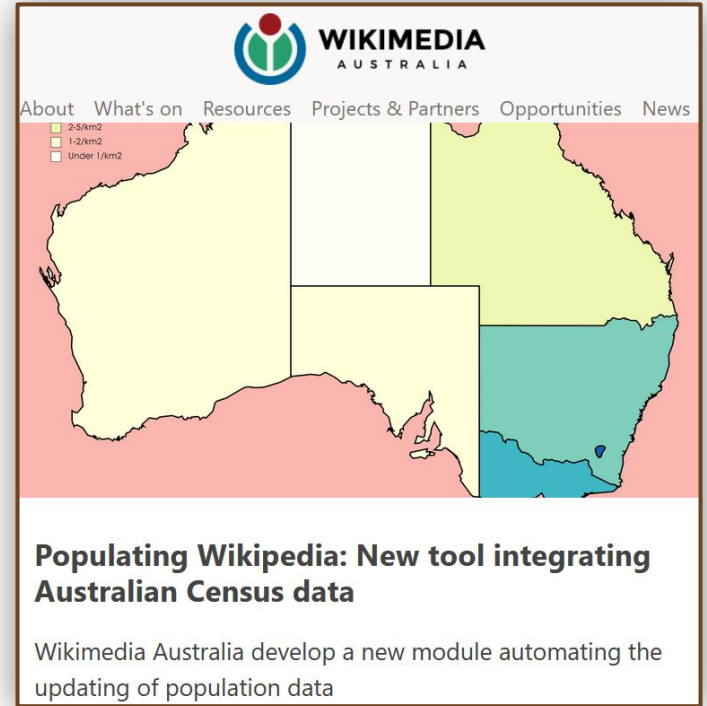
Friday 18 August 2023



The project

- Funded by: Wikimedia Australia
- Context: Wikidata fellowship
- Mentors: [Samwilson](#), [99of9](#), [Canley](#) and [Tenniscourtisland](#)
- Timeframe: April - July 2022
- Detailed project summary [here](#)
- More documentation [here](#)

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The image is a screenshot of a blog post from Wikimedia Australia. At the top, there is the Wikimedia Australia logo and a navigation menu with links for 'About', 'What's on', 'Resources', 'Projects & Partners', 'Opportunities', and 'News'. Below the menu is a map of Australia with a legend indicating population density: 2-5/km² (yellow), 1-2/km² (light green), and Under 1/km² (light red). The map shows the Western Australian coast in yellow, the Northern Territory and Queensland in light green, and the southern and eastern coastal regions in light red. Below the map, the title of the blog post is 'Populating Wikipedia: New tool integrating Australian Census data'. The main text of the post reads: 'Wikimedia Australia develop a new module automating the updating of population data'.

Project [blog post](#)

The challenge

- [15 000](#) Australian place articles in English Wikipedia
- [12 300](#)* with population values

↳ lots of population figures to update!

Old method

- Manual updates to *pop*, *pop_year* and *pop_footnotes*

```
| pop                = 2,192,229 <!-- NOTE: UPDATES TO POPULATION NUMBER REQUIRE A RELIABLE SOURCE (usually Statistics) -->
| pop_year           = 2021
| pop_footnotes      = <ref name=ABSERP18>{{cite web |publisher=[[Australian Bureau of Statistics]]|title=G Perth|url=https://www.abs.gov.au/statistics/people/population/regional-population/2021|date=30 August 2022}}
```

Editing the [Infobox Australian place](#) template

Coordinates	31°57′21″S 115°51′38″E﻿ / ﻿
Population	2,192,229 (2021) ^[2] (4th)
 • Density	341.5804/km ² (884.689/sq mi)
Established	4 June 1829
Area	6,417.9 km ² (2,478.0 sq mi)(GCCSA) ^[3]
Time zone	AWST (UTC+08:00)

Place article infobox

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* As at July 2022



But ... Wikidata!

- All Australian place articles are linked to **Wikidata** items
- Most place items include consistent population statements*



- Use a **Lua module** to select population value and give to **Infobox Australian Place** template

population	429
point in time	10 August 2021
applies to part	Suburb and Locality
determination method	Australian Census 2021
▼ 1 reference	
reference URL	https://www.abs.gov.au/census/find-census-data/quickstats/2021/SAL51510
retrieved	28 June 2022
title	Walpole (English)
published in	QuickStats
Australian Statistical Geography 2021 ID	SAL51510

Population statement in Wikidata

Conceptual design

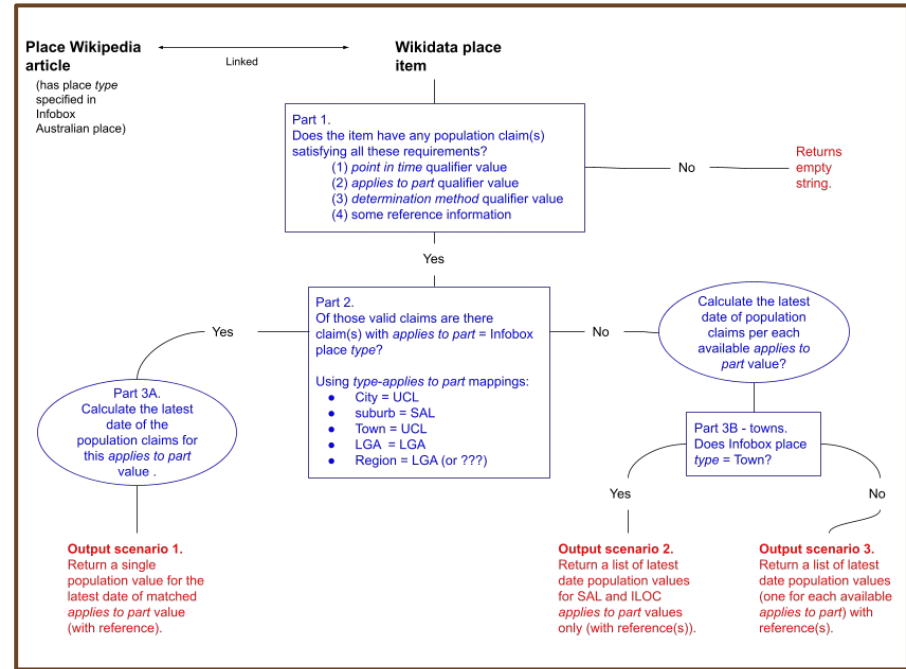
Which population value?

1. Must have good reference information
2. *Applies to part* matches Infobox place *type*
3. Most recent value

Module outputs

- Population value
- Detailed reference

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[Population value selection method](#)

PopulationFromWikidata Lua module

- Module called when *pop* value removed from Infobox Australian Place template

```
| pop           = <!--leave blank to draw the latest automatically from Wikidata-->
| pop_year =
| pop_footnotes =
```

Infobox edit to call module

Population	31,930 (LGA 2021) ^[1]
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1. [^] Australian Bureau of Statistics (28 June 2022). "Fremantle (Local Government Area)" 🔗. *Australian Census 2021 QuickStats*. Retrieved 28 June 2022. 🔗

Lua module outputs

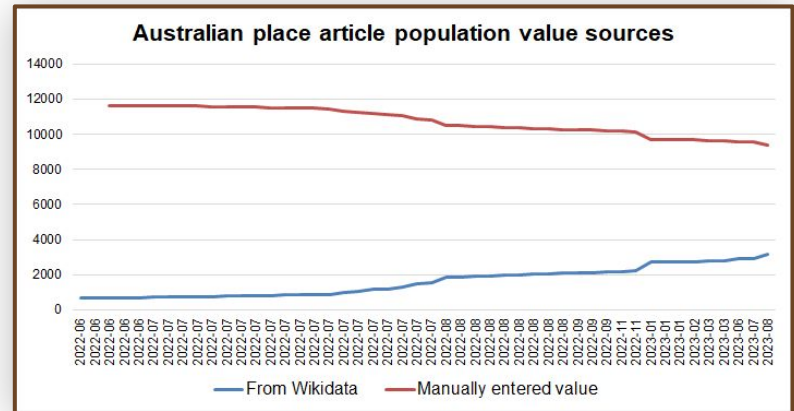
- Now working in 3 134* articles!

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```
local function GetRefsForClaim(claim, defaulttitle)
    local refs = ""
    for b,x in pairs(claim.references) do
        local refurl = ""
        if claim.references[b].snaks[RefURL_P] ~= nil then
            refurl = claim.references[b].snaks[RefURL_P][1].datavalue.value
        end

        local reftitle = defaulttitle
        if claim.references[b].snaks[RefTitle_P] ~= nil then
            reftitle = claim.references[b].snaks[RefTitle_P][1].datavalue.value.text
        end
    end
end
```

[PopulationFromWikidata module](#)



Project summary [graphs and tabular data](#)

* As at 11 August 2023

Thanks!

[MaiaCWilliams](#)

Lua module:

<https://en.wikipedia.org/wiki/Module:PopulationFromWikidata>

Project summary:

https://wikimedia.org.au/wiki/Populating_Wikipedia:_New_tool_integrating_Australian_Census_data

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