Citing GIS Layers in APA

There isn't much guidance on citing datasets used or edited in analysis in APA (or any citation guide), and absolutely none for GIS datasets.

Since the APA Style guide doesn't have guidance on GIS data, we'll just use their [general dataset guidance](https://apastyle.apa.org/style-grammar-guidelines/references/examples/data-set-references)*,* which says that if you conducted secondary analysis or are presenting your own data made from a dataset, cite the data set itself (versus if you didn't do any secondary analysis or editing, you would cite the publication that the data were published in, like a report or the NC OneMap webpage).

So since you'll be citing the datasets directly, it should be assumed by your readers (and instructor) that you did some editing and secondary analysis. When you're doing an in-text narrative or parenthetical citation in a paper or reflection, you might include something like "NC OneMap data from the NC Government Data Analytics Center and Center for Geographic Information and Analysis (2019, 2020, 2021) were ground-truthed and used to calculate xyz." just to make it extra clear that you did some work on the data. The year is immediately after the authors' names here, and I'm pretending I'm citing 3 datasets from the same author, from 2019, 2020, and 2021 - [APA guidance on parenthetical and narrative citations](https://apastyle.apa.org/style-grammar-guidelines/citations/basic-principles/multiple-works).

Your citation for each dataset would look something like this ([using this data as an example](https://www.nconemap.gov/datasets/nconemap::water-bodies-western-nc-local-res-1/about)):

North Carolina Government Data Analytics Center, & North Carolina Center for Geographic Information and Analysis.(2021). *Water Bodies (Western NC "Local-Res")*[Data set]. North Carolina Department of Information Technology. <https://www.nconemap.gov/datasets/nconemap::water-bodies-western-nc-local-res-1/about>.

**And here's the breakdown of how I did that:**

North Carolina Government Data Analytics Center, & North Carolina Center for Geographic Information and Analysis. (2021). *Water Bodies (Western NC "Local-Res")* [Data set]. North Carolina Department of Information Technology. <https://www.nconemap.gov/datasets/nconemap::water-bodies-western-nc-local-res-1/about>.

I pulled the author information from the NC OneMap "Terms" page. The authors here are "group authors," the NC Government Data Analytics Center and the NC Center for Info and Analysis, both layered under the NC Department of IT. In APA, only the most specific group authors are listed, and the broader layers (here, the NC Department of IT) are moved to the "publisher" information before the url. [APA guidance on group authors](https://apastyle.apa.org/style-grammar-guidelines/references/elements-list-entry#groupname).

The year is the year the most recent version of the *data* was published - in this case, the data was published in 2019 but last updated in 2021.

The title of the dataset is put in italics and includes things next to it like (Western NC "Local-Res"), which is considered to be a part of the title.

If there's a version number or other id number for the dataset, that would be included after the title, not in italics. We don't have that for this one.

The format part is flexible - you could specify [GIS data set] if you wanted to, or a specific type, such as [Feature layer].

And then back to the publisher: here, it's the NC Dep't of IT. If the data were published by a different entity (for example ICPSR, or if it's in the ArcGIS Living Atlas, Esri), it'd go there instead.

And then finally, the url. Use a DOI or a stable url if you can find them, but for NC OneMap, I prefer to use the url in the address bar since it gives us information about the website and webpage we're on, in case the link breaks later.