

chicago manual of style geographic data visualization citation

Navigating the Nuances: Chicago Manual of Style Geographic Data Visualization Citation

chicago manual of style geographic data visualization citation demands a thorough understanding of both academic citation standards and the unique challenges presented by visual data. When researchers and writers incorporate maps, charts, and other visual representations of geographic information into their work, accurately attributing the source is paramount for academic integrity and clarity. This comprehensive guide delves into the intricacies of citing geographic data visualizations according to the Chicago Manual of Style (CMOS), providing practical advice and detailed examples for various scenarios. We will explore the fundamental principles of citation, the specific elements required for geographic data, and how to adapt these principles to different types of visualizations, ensuring your citations are both compliant and informative.

Table of Contents

Understanding the Core Principles of CMOS Citation

Essential Components of a Geographic Data Visualization Citation

Citing Static Geographic Data Visualizations

Citing Interactive Geographic Data Visualizations

Citing Data Derived from Geographic Sources

Common Challenges and Best Practices in Geographic Data Visualization Citation

When to Cite Geographic Data Visualizations

Understanding the Core Principles of CMOS Citation

The Chicago Manual of Style, in its latest edition, emphasizes clarity, consistency, and completeness in all citations. The fundamental goal is to provide readers with enough information to locate the original source material themselves. This principle extends directly to geographic data visualizations. Unlike traditional textual sources, visualizations often combine data, design, and interpretation, requiring a citation that captures these multifaceted origins. Adhering to CMOS means carefully considering what information is crucial for attribution and presenting it in a standardized format. The manual prioritizes author-date or notes-bibliography systems, and understanding which system you are employing is the first step in correctly citing your visual data.

The Importance of Attribution

Attribution is not merely a bureaucratic requirement; it is the bedrock of scholarly communication. When you cite a geographic data visualization, you acknowledge the intellectual property and hard work of the creators. This prevents plagiarism and allows your audience to verify your findings and explore the original data for themselves. Failure to cite properly can lead to accusations of academic dishonesty and undermine the credibility of your research. Therefore, a meticulous approach to citing these visual elements is indispensable.

Choosing the Right Citation System

Chicago offers two primary citation systems: the notes-bibliography system and the author-date system. For academic papers and books, the notes-bibliography system, using footnotes or endnotes along with a bibliography, is often preferred. The author-date system, with in-text parenthetical citations and a reference list, is more common in the sciences and social sciences. Regardless of the system chosen, the information required for the citation will largely remain the same, but its placement and format will differ.

Essential Components of a Geographic Data Visualization Citation

To construct a robust citation for a geographic data visualization, several key pieces of information are typically required. These components act as building blocks, ensuring that your reader can reconstruct the origin of the visual data you have presented. Capturing these elements accurately is crucial for meeting CMOS standards and maintaining academic rigor.

Author/Creator or Issuing Body

The primary identifier for any source is its creator. For geographic data visualizations, this could be an individual researcher, a government agency, a non-profit organization, a company, or even a specific software tool if it generated the visualization based on user input. Identifying the responsible entity is the first step in tracing the origin of the visual information.

Title of the Visualization

Every visualization should have a descriptive title that clearly indicates

its subject matter. This might be a formal title given by the creator or a descriptive caption if no formal title exists. If the visualization is part of a larger work, such as a report or a website, its specific title within that larger context should be included.

Date of Creation or Publication

The date associated with the visualization is critical for establishing its currency and context. This could be the date of publication, the date of creation, or the date the data was last updated. For online visualizations, the access date is also important, especially if the content is dynamic or subject to change.

Source or Publisher Information

This component identifies where the visualization was found or published. For printed materials, this would be the journal, book, or report. For online content, it would be the website name, the URL, and potentially the name of the host institution or organization.

Data Source(s)

Crucially for geographic data, identifying the underlying data sources is often necessary. This acknowledges the raw information upon which the visualization is built and allows readers to understand the provenance of the geographic information itself. This might include specific datasets, surveys, or government records.

Scale, Projection, and Coordinate System (if applicable)

For maps and spatial data visualizations, technical details such as the map projection, coordinate system, and scale can be vital for accurate interpretation and reproduction. While not always explicitly required by CMOS for every citation, including this information can significantly enhance the scholarly value of your citation, especially in technical fields.

Citing Static Geographic Data Visualizations

Static visualizations, such as those found in printed books, journals, or static images in reports, require a citation that reflects their fixed

nature. The principles remain the same: identify the creator, title, publication details, and the original data source. The presentation will differ slightly depending on whether you are using notes-bibliography or author-date.

Citing Maps from Books or Journals

When a map is part of a published book or journal article, you will cite it as a component of that larger work.

In the notes-bibliography system, a footnote or endnote might look like this:

1. Creator Name, "Title of Map," in Title of Book (Publisher, Year), Page Number.

If the map is from a journal article:

2. Creator Name, "Title of Map," in Author(s) of Article, "Title of Article," Journal Title Volume, no. Issue (Year): Page Number.

In the author-date system, the reference list entry would be structured similarly, with the in-text citation referencing the author and year.

Citing Charts and Graphs from Reports

For charts and graphs within reports, whether printed or digital PDFs, the citation process is analogous.

Notes-bibliography example:

3. Issuing Body, "Title of Chart or Graph," in Title of Report (Report Number, Publisher, Year), Page Number.

Author-date example:

Issuing Body. Year. "Title of Chart or Graph." In Title of Report, Report Number, Page Number. Publisher.

Including Access Information for Digital Static Visualizations

Even if a visualization is static, if accessed online, including the URL and access date is good practice, particularly if it's from a source that might be updated or removed.

Citing Interactive Geographic Data Visualizations

Interactive visualizations, increasingly common online, present unique challenges due to their dynamic nature. They often involve data that updates frequently or allows users to manipulate the view. CMOS provides guidance for citing digital resources, which can be adapted here.

Citing Web-Based Maps and Dashboards

When citing interactive maps or data dashboards found online, treat them as a standalone online resource.

Notes-bibliography example:

4. Creator Name or Organization, "Title of Interactive Visualization," last modified Month Day, Year (if available), accessed Month Day, Year, URL.

If the interactive visualization is part of a larger website:

5. Creator Name or Organization, "Title of Interactive Visualization," accessed Month Day, Year, URL.

Author-date example:

Creator Name or Organization. Year (if available). "Title of Interactive Visualization." Accessed Month Day, Year. URL.

Describing Interactivity

If specific interactive features are crucial to your use of the visualization (e.g., a slider that demonstrates change over time), you may want to briefly describe this functionality within your text or in a footnote to provide context for your citation.

Citing Data Derived from Geographic Sources

Often, you will not cite a visualization directly but the underlying data from which a visualization was created. This is particularly relevant when you have manipulated or filtered the data yourself to create your own visual representation.

Citing Datasets

If you use a specific geographic dataset, you should cite the dataset itself.

Notes-bibliography example:

6. Creator Name of Dataset, "Title of Dataset" (version, if applicable), Data type (e.g., Shapefile, CSV), date of data creation or update, accessed Month Day, Year, URL or repository.

Author-date example:

Creator Name of Dataset. Year. "Title of Dataset." Version. Data type. Accessed Month Day, Year. URL or repository.

Citing Government Data Portals

Many government agencies provide access to geographic data through online portals. Citing these sources requires identifying the agency and the specific dataset.

Notes-bibliography example:

7. U.S. Census Bureau, "TIGER/Line Shapefiles" (2022), accessed Month Day, Year, URL.

Author-date example:

U.S. Census Bureau. 2022. "TIGER/Line Shapefiles." Accessed Month Day, Year. URL.

Mentioning Software Used for Visualization

While not part of the citation itself, it is often good practice in the text of your work to mention the software used to create your visualizations (e.g., ArcGIS, QGIS, Tableau, R with ggplot2) to provide technical context to your audience.

Common Challenges and Best Practices in Geographic Data Visualization Citation

Citing geographic data visualizations is not always straightforward. Several common challenges arise, and understanding best practices can help overcome them.

When No Clear Author is Identifiable

In cases where a clear author or creator is not immediately apparent, look for an issuing body, organization, or the website itself as the responsible entity. If all else fails, attribute it to the title of the work.

Handling Dynamic or Constantly Updated Data

For visualizations and datasets that are frequently updated, citing the most recent version available at the time of your access is standard. Always record your access date to show when you consulted the information.

Citing Visualizations Generated by AI Tools

The landscape of AI-generated content is evolving, and CMOS guidance is continuously updated. For AI-generated visualizations, it is crucial to identify the AI model used, the prompts, and the date of generation, along with any specific terms of service regarding citation provided by the AI developer.

When Data is Derived from Multiple Sources

If a visualization compiles data from numerous sources, cite the primary dataset or the compilation effort, and then consider listing the most significant or influential original data sources in a note or a dedicated section of your bibliography if necessary for thoroughness.

Best Practice: Be Consistent

The most important best practice is consistency. Whichever format you choose for your citations, apply it uniformly throughout your work. This makes your citations predictable and easier for your readers to follow.

When to Cite Geographic Data Visualizations

The decision of when to cite a geographic data visualization hinges on its role in your argument and its originality.

Directly Reproduced or Adapted Visualizations

If you reproduce a map, chart, or graph exactly as it appeared in the original source, or if you adapt it significantly while retaining its core visual elements, it absolutely requires a citation. This includes figures embedded in your text or appendix.

Visualizations Conveying Specific Data or Findings

Even if you create your own visualization based on data from a source, if that visualization highlights a specific finding, trend, or piece of data that is not common knowledge and is attributed to that source, you must cite the original source of the data.

Illustrative Visualizations

If a visualization serves primarily to illustrate a concept or provide context that you are discussing, and it comes from a specific source, it should be cited to give credit and allow further exploration.

Avoiding Citation

You are generally not required to cite common geographic features (e.g., the location of major cities) that are universally known or readily available from multiple standard reference sources. Similarly, if you generate a simple visualization (like a basic bar chart of your own survey results) using standard software without relying on specific pre-existing visualizations or complex data structures, and the data is original to your research, a citation for the visualization itself is usually not needed, though the underlying data may require citation.

FAQ

Q: How do I cite a map created by a government agency for a thesis using the Chicago Manual of Style?

A: For a government agency map in a thesis using the Chicago Manual of Style (notes-bibliography system), you would typically create a footnote or endnote. The format would be similar to: "U.S. Geological Survey, Topographic Map of Yosemite Valley, California (Reston, VA: U.S. Geological Survey, 2018)." In the bibliography, it would be: U.S. Geological Survey. Topographic Map of Yosemite Valley, California. Reston, VA: U.S. Geological Survey, 2018. Ensure you include the most specific identifying information available for

the map.

Q: What if I used an online interactive map that doesn't have a clear modification date?

A: If an online interactive map lacks a specific modification date, you should omit that element from your citation. Focus on the creator/organization, the title of the visualization, the access date, and the URL. For example, in a footnote: "National Oceanic and Atmospheric Administration, 'Sea Level Rise Viewer,' accessed October 26, 2023, <https://coast.noaa.gov/slr/>." In the reference list: National Oceanic and Atmospheric Administration. 'Sea Level Rise Viewer.' Accessed October 26, 2023. <https://coast.noaa.gov/slr/>.

Q: I created a choropleth map in R using census data. Do I cite the R code or the census data?

A: You primarily need to cite the source of the data used to create your map. In this case, you would cite the specific census dataset (e.g., from the U.S. Census Bureau). If you are sharing your R code and wish for others to reproduce your work precisely, you might reference the code in an appendix or as supplementary material, but the main citation focus is on the provenance of the geographic data itself.

Q: How does the Chicago Manual of Style treat citations for visualizations that are part of a presentation, like PowerPoint slides?

A: For visualizations embedded in a presentation, if the presentation is shared, you would cite it as a presentation. For example, in a footnote: "Jane Doe, 'Climate Change Trends in the Arctic' (presentation, Annual Geography Conference, Seattle, WA, November 15, 2023), slide 8." In a bibliography or reference list: Doe, Jane. 'Climate Change Trends in the Arctic.' Presentation, Annual Geography Conference, Seattle, WA, November 15, 2023. If the visualization within the presentation is itself derived from another source, that original source must also be cited.

Q: What is the difference in citing a static image of a map versus an interactive map online?

A: The primary difference lies in how you treat the "publication" and "access" information. For a static image of a map (e.g., a JPEG downloaded from a website or a map within a PDF), you cite it as a digital image or a component of the larger file. For an interactive map, you are citing the live, dynamic resource, and the access date becomes more critical, acknowledging that the interactive element might change or disappear. The URL points to the active site.

Q: If I modify a copyrighted map and use it in my

publication, how do I cite it according to Chicago?

A: Even if you modify a copyrighted map, you are still required to cite the original source. In addition to the standard citation for the original map, you should also note in your text or a footnote that the map has been modified. For example: "Map based on DataFigure 1 by the National Mapping Agency, modified by the author." Your citation for DataFigure 1 would follow standard CMOS rules for the original source.

Q: How detailed should the data source information be for a geographic visualization citation?

A: The level of detail required for data sources depends on your field and the nature of the data. For academic work, aim for enough detail for a reader to identify and potentially access the original data. This usually includes the name of the data provider, the title or description of the dataset, and any versioning or publication dates. If the data is proprietary or from a specific project, mention that.

Q: When is it acceptable to NOT cite a geographic visualization?

A: You generally do not need to cite a geographic visualization if it depicts information that is considered common knowledge or if you created it from scratch using only your own original data and standard, widely available software without relying on any pre-existing visualizations or specific data sources that require attribution. For instance, a simple hand-drawn map of your local neighborhood for illustrative purposes, where the information is common knowledge to people familiar with the area, might not require formal citation if it doesn't claim to represent precise or authoritative geographic data.

[Chicago Manual Of Style Geographic Data Visualization Citation](#)

Chicago Manual Of Style Geographic Data Visualization Citation

Related Articles

- [chicago manual of style for websites](#)
- [chicago manual of style for theater studies](#)
- [chicago manual of style for magazine content editors](#)

[Back to Home](#)