

Understanding Land Records

How to Use Maps In Genealogy Research

- Visualize Hometowns: Maps help you imagine your ancestor's communities with their schools, parks, businesses, terrain, roads, and other landmarks.
- Detect Border Changes: By using maps you detect boundary lines of city, county, state, and township to determine which archives to contact for records.
- Seeing How A Community Changed Over Time. This includes street name changes and renumbering of addresses.
- Find Ancestral Land: You will need historical maps to pinpoint the location of ancestor's property, and find deeds and land records.



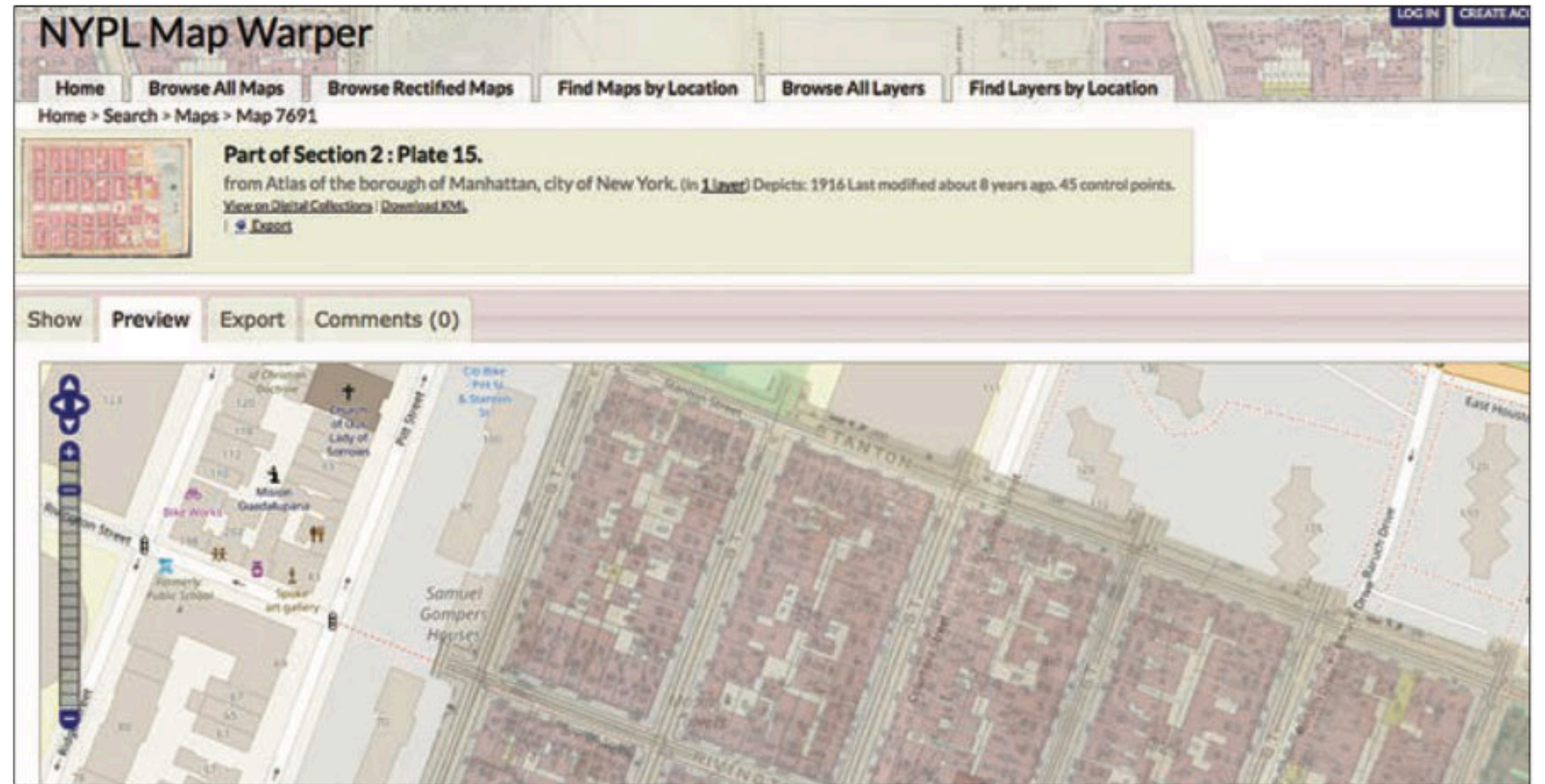
- Mapping Out Other Documents. Use the maps to find residents listed in city directories and census records.
- Use Census Enumeration District (ED) Maps to look for hard-to-find ancestors.
- Use Historical Maps To Plan Travel and visits to your ancestral hometowns.



NYPL MAP WARTER

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We've mentioned the New York Public Library <www.nypl.org/about/divisions/map-division> as a great resource for finding digitized maps. But the organization also has a valuable Map Warper <maps.nypl.org/warper> that will help you view historical maps ovetop modern maps from the comfort of your browser. Simply log in, select a map from the NYPL's collection, and digitally align ("rectify") points in the map with coordinates on a modern geographic place. You can also view maps that other users have rectified.

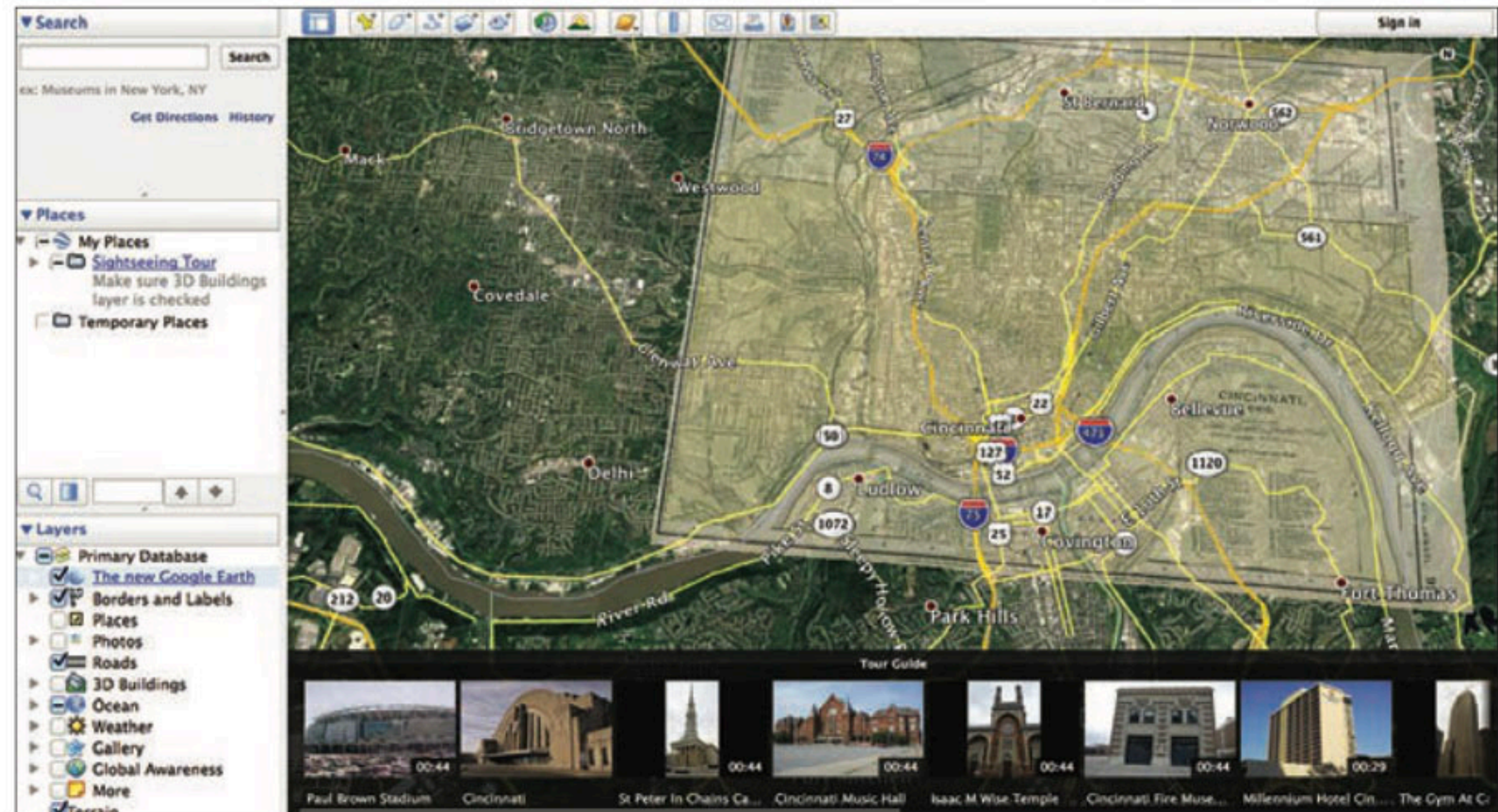


Overlaying old and modern maps can help you locate an ancestor's residence.

Google Earth Pro

GOOGLE EARTH PRO

One of the most powerful mapping tools allows you to view historical maps over top of Google Maps. Once you launch the free Google Earth Pro on your desktop (download it here <www.google.com/earth/versions>), you'll have the option to add an Image Overlay. Select the map you'd like to view, then adjust the map's position and rotation to match it up with the modern view. You can also adjust the map's opacity, making it easier for you to switch between the historical and modern views.

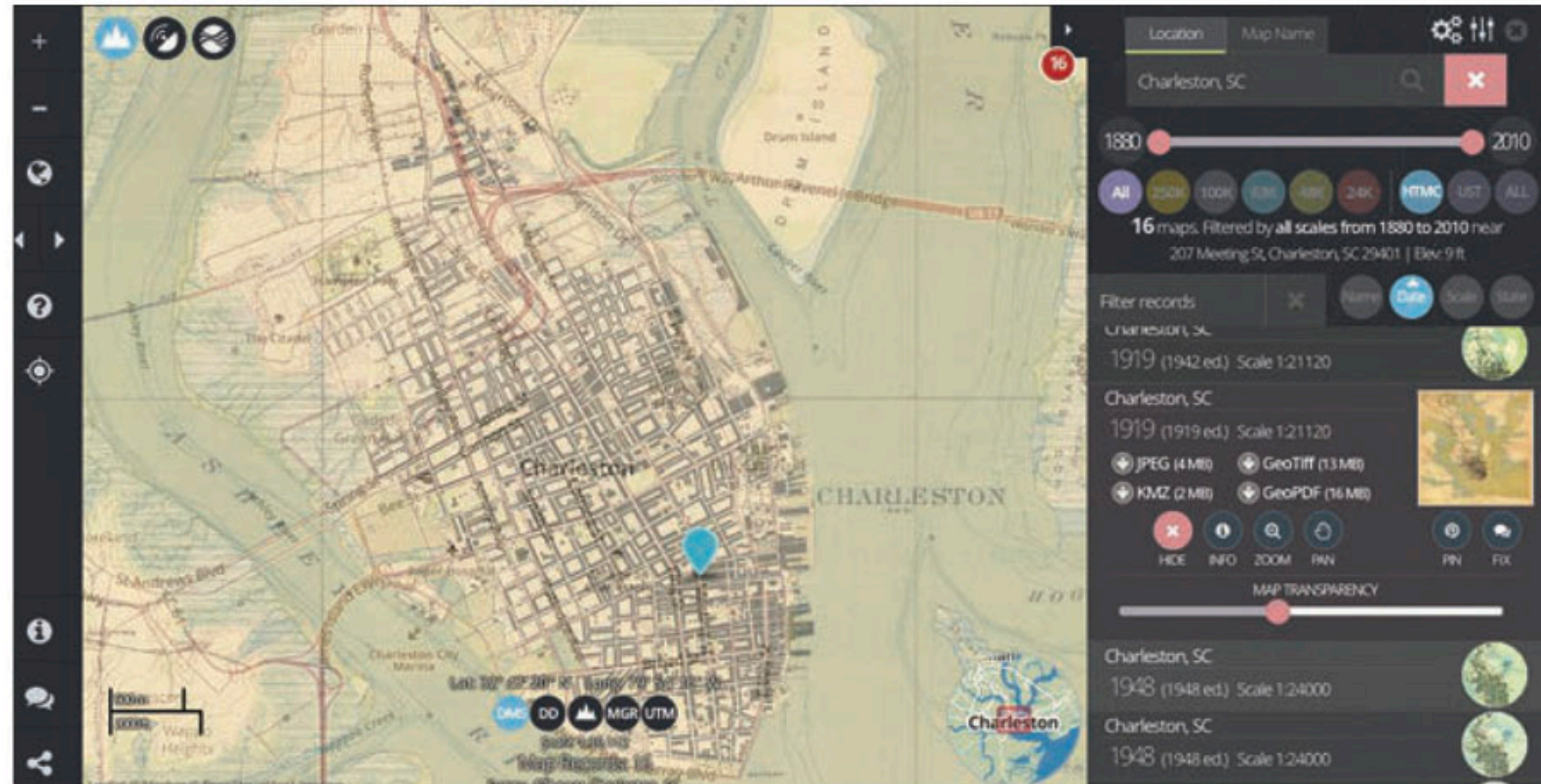


Google Earth lets you import old maps to overlay with modern satellite imagery.

USGS Topoview

USGS TOPOVIEW

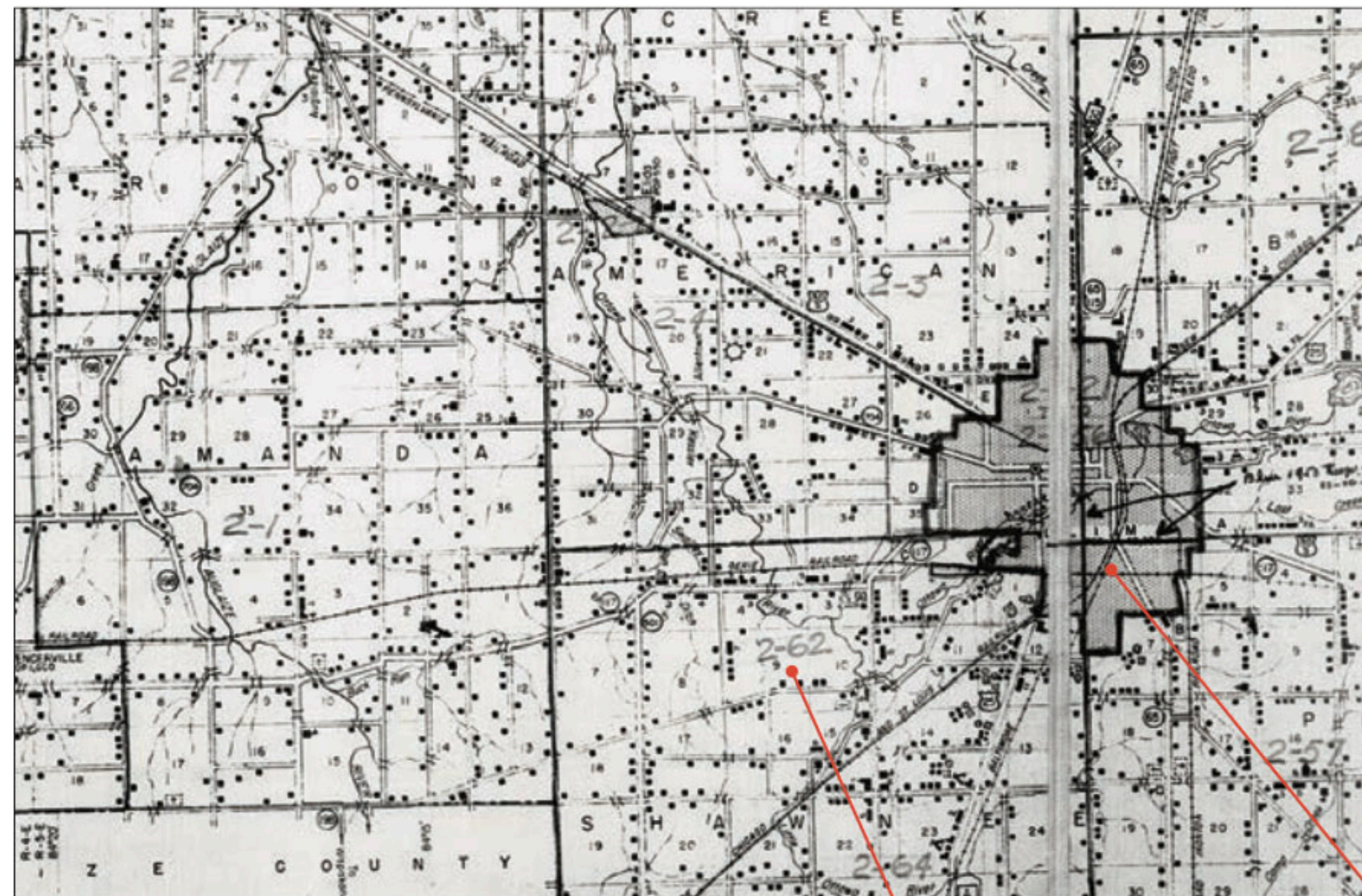
The US Geological Survey (USGS) has been creating topographical maps of the country for more than 125 years, and it's made much of its collection viewable over modern maps. Visit the topoView ngmdb.usgs.gov/topoview/viewer and type in a location. Select the location from the dropdown menu, then view the available historical maps in the right-hand column. Use filters to narrow your results by name, date, scale (e.g., 24k or 250k), or state. Click Show to see the image over a modern map, and adjust the map's transparency as necessary. You can even download the historical map for free in one of several different file types.



You'll see the lay of the land with topoView. Here, a 1919 USGS map of Charleston, S.C., overlays a modern map of the area.

Historical Maps

1 Enumeration district maps



Source: National Archives and Records Administration

ED numbers are typically handwritten and larger than other digits you might see, such as ward numbers or sections of a township.

DETAILS

Created: To organize enumeration efforts during the US census

Notes: These maps indicate how a region was divided for census purposes in a given year. Large numbers indicate the enumeration district (ED). Find your ancestor's ED on the map, then browse census records for hard-to-find families. You can find ED maps for 1900–1940 at FamilySearch <www.familysearch.org>.

Research uses

- Finding ancestors hiding in the census
- Tracking communities over time

Higher-population areas require more EDs, and so you may need to consult an inset (such as here, where EDs 2-21 through 2-56 are on a separate map).

2 Ethnographic maps



Source: David Rumsey Map Collection

Each color represents a particular ethnic group. The designations could be specific (like purple for Greek) or broad (like yellow for Slavic).

DETAILS

Created: To study population trends

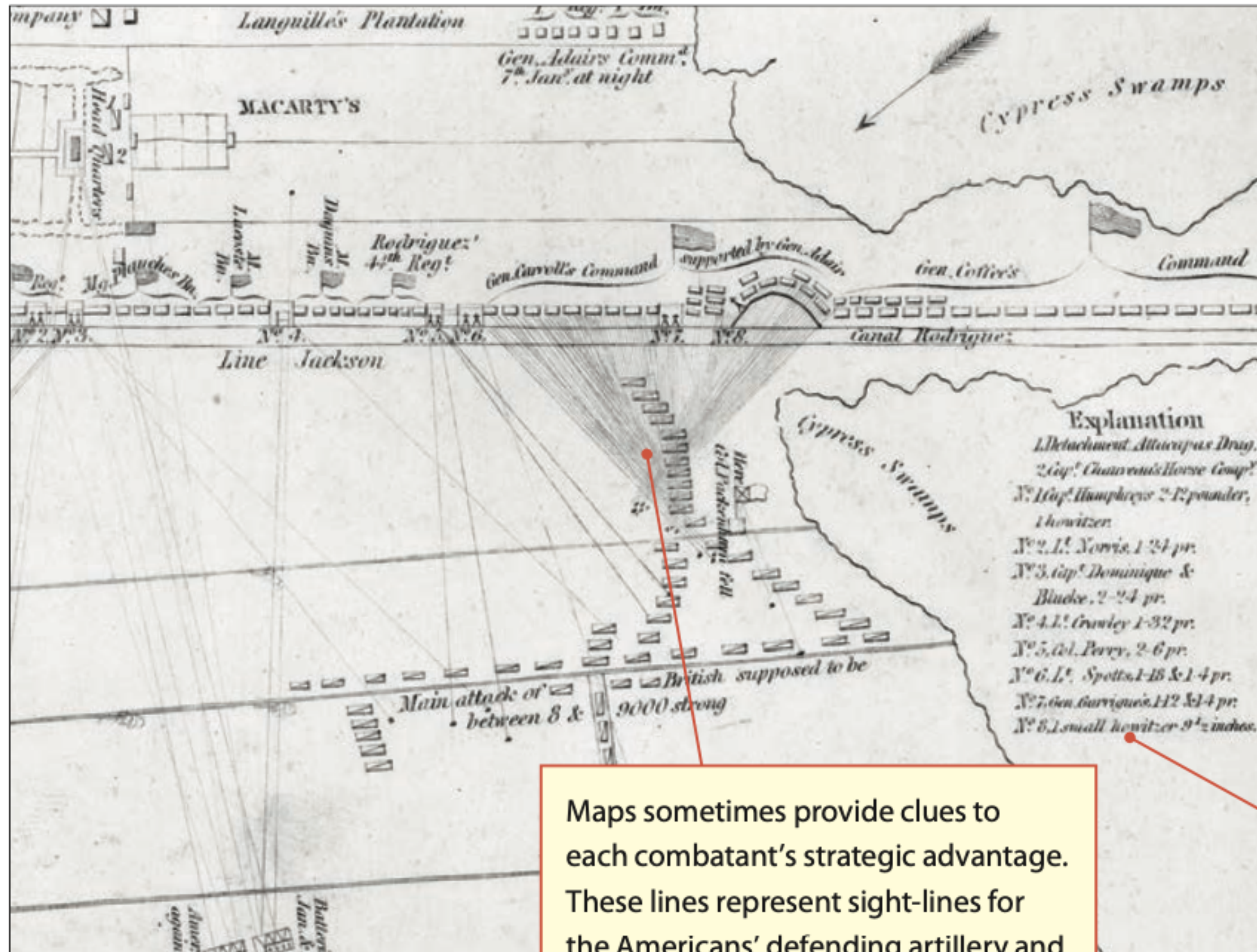
Notes: These maps are usually included in atlases. They typically have color-coded regions indicating various ethnic groups, so be sure to consult the map's key.

Research uses

- Tracking migration groups
- Learning more about communities
- Finding ancestral hometowns

Areas with many colors, such as this portion of the Austro-Hungarian Empire that has tan (Magyar/Hungarian), pink (German), yellow (Slavic), and blue (Romanian), indicate a more diverse region.

3 Military maps



Source: Library of Congress

Maps sometimes provide clues to each combatant's strategic advantage. These lines represent sight-lines for the Americans' defending artillery and sharpshooters, who proved pivotal.

DETAILS

Created: To make strategic military decisions during conflicts; to track and document units' movements

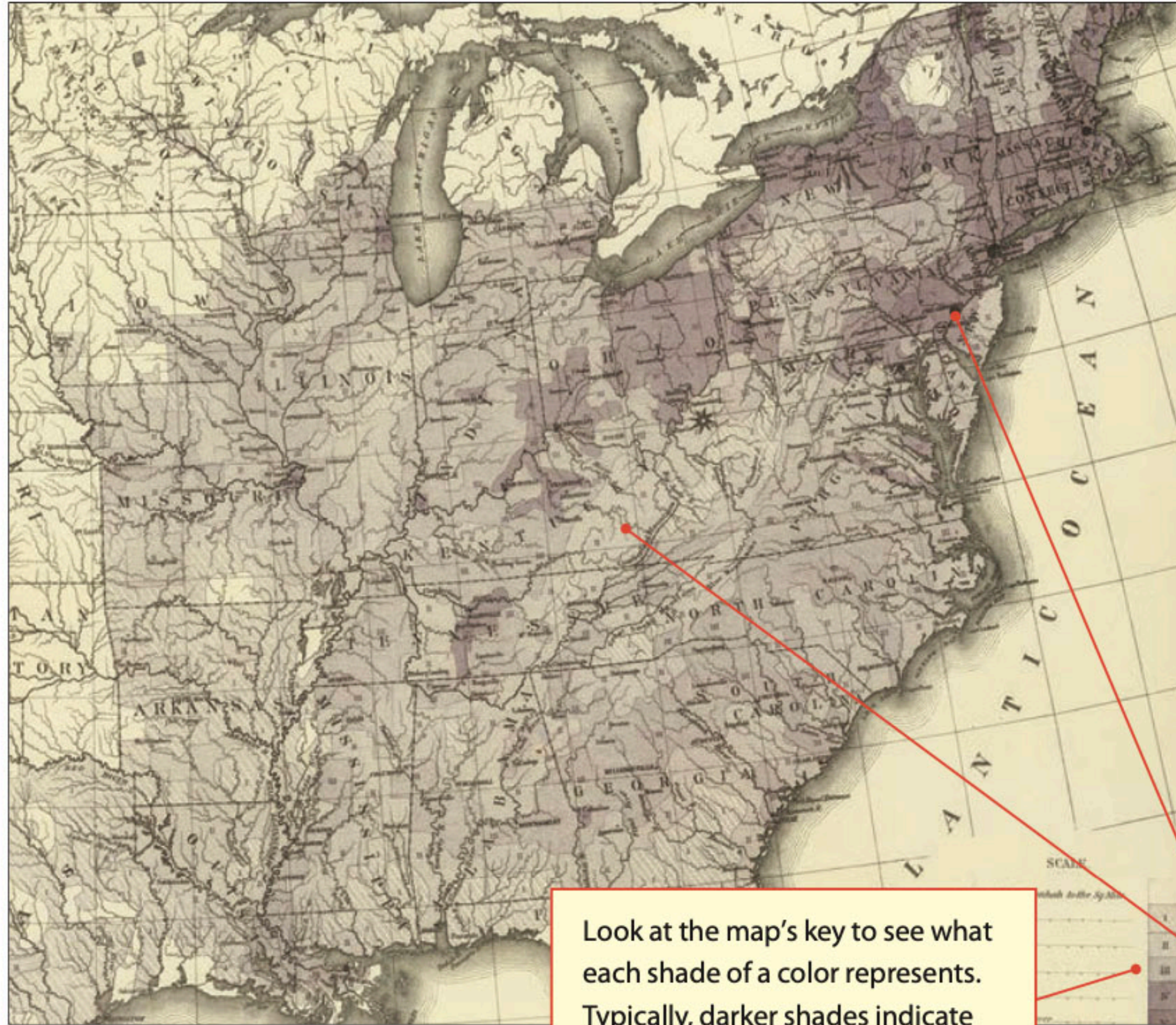
Notes: Military maps can show individual regiment movements, defense garrisons and the locations of important strategic events. Look to the key for information about what the different colors and textures indicate.

Research uses

- Tracing ancestors' regiments
- Understanding military records
- Studying historical battles

Look for a key that may identify individual units or commanders.

5 Population density maps



Source: David Rumsey Map Collection

Look at the map's key to see what each shade of a color represents. Typically, darker shades indicate higher population densities.

DETAILS

Created: To study population trends

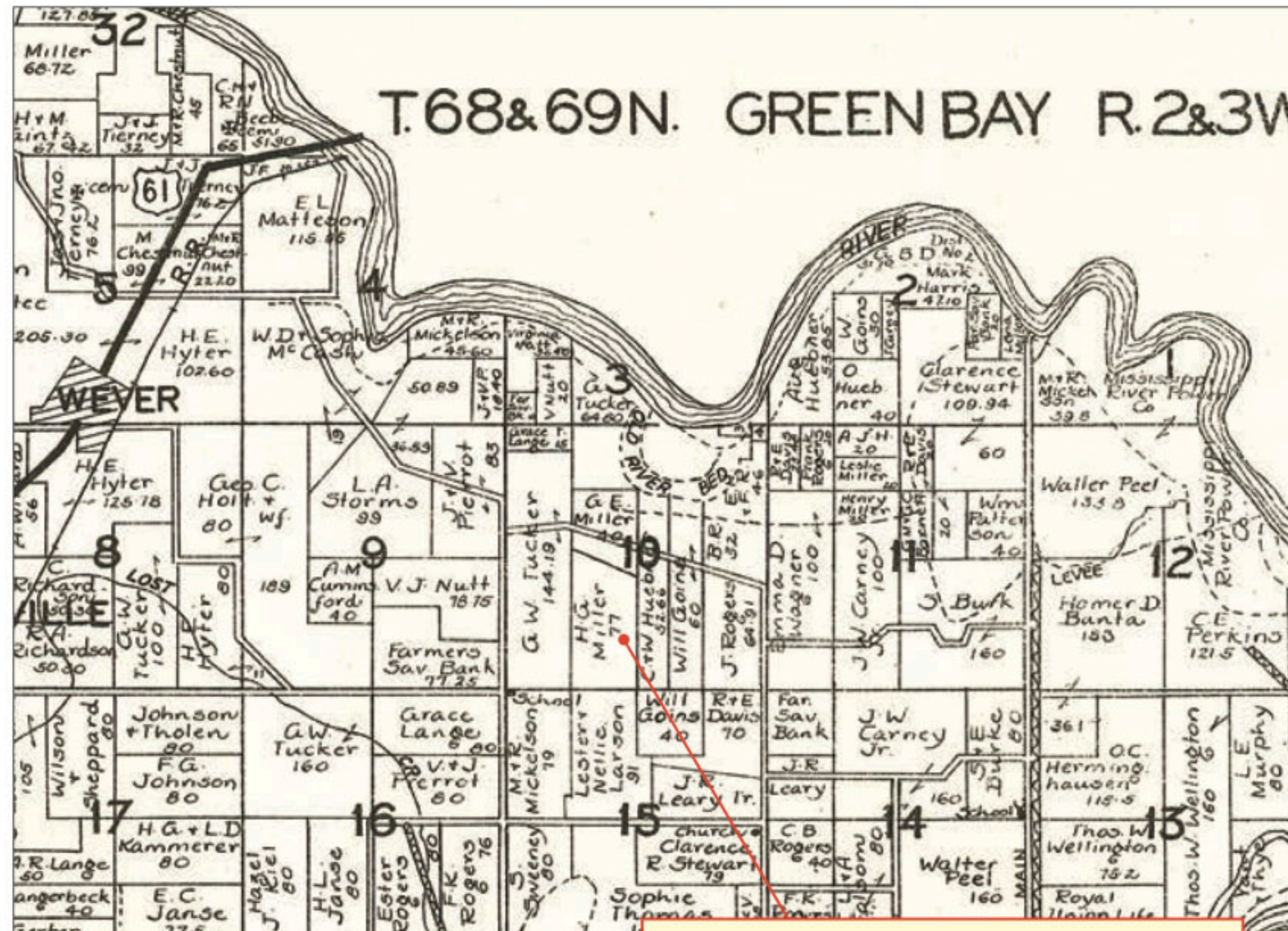
Notes: These maps display population density using various shades of a particular color. Like ethnographic maps, these were often included as part of larger atlases. For US-based density maps, look for source information—these maps often were created by compiled data from a particular federal census.

Research uses

- Learning more about ancestral communities, particularly during census years
- Tracing migration patterns

As you might expect, the map indicates higher population density in urban areas (such as around Philadelphia) than in rural areas (such as eastern Kentucky).

4 Plat maps



Source: University of Iowa Digital Library

Landowners were often named in plat maps. Use these details to find land and property records, such as deeds.

DETAILS

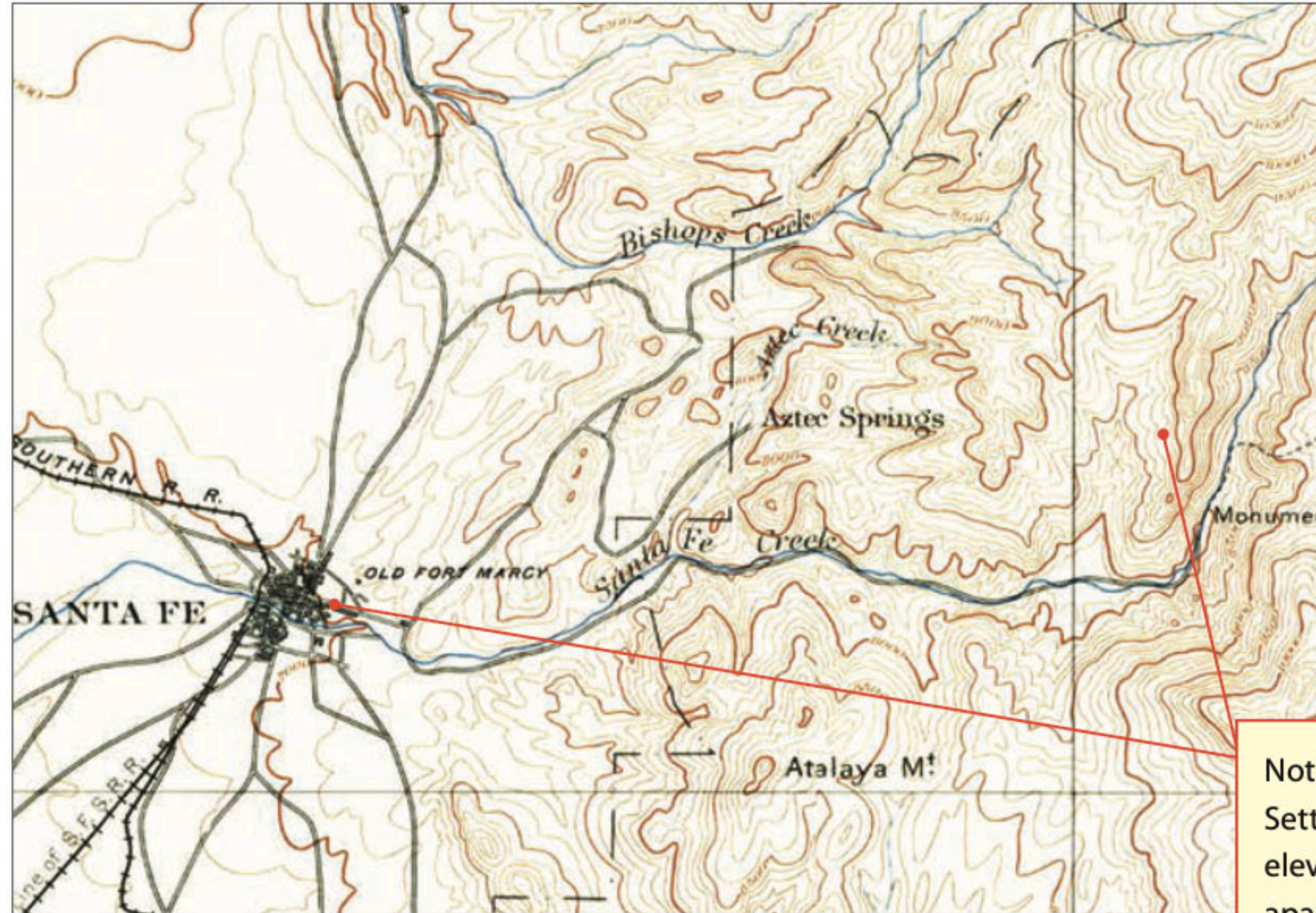
Created: To track land ownership

Notes: Governments created plat maps (also called cadastral maps or survey plats) to account for parcels of land. The numbers indicate administrative divisions, and maps usually also include landowners' names. Try comparing the names to contemporary census records. These maps weren't kept as consistently as ED or Sanborn maps. Look for them at state archives and digitized online (search for a town, county or township at the Library of Congress or David Rumsey Map Collection website).

Research uses

- Locating your ancestor's land
- Finding land records
- Learning about communities
- Understanding town histories

6 Topographic maps



Source: U.S. Geological Survey

News

DETAILS

Created: To survey towns and regions

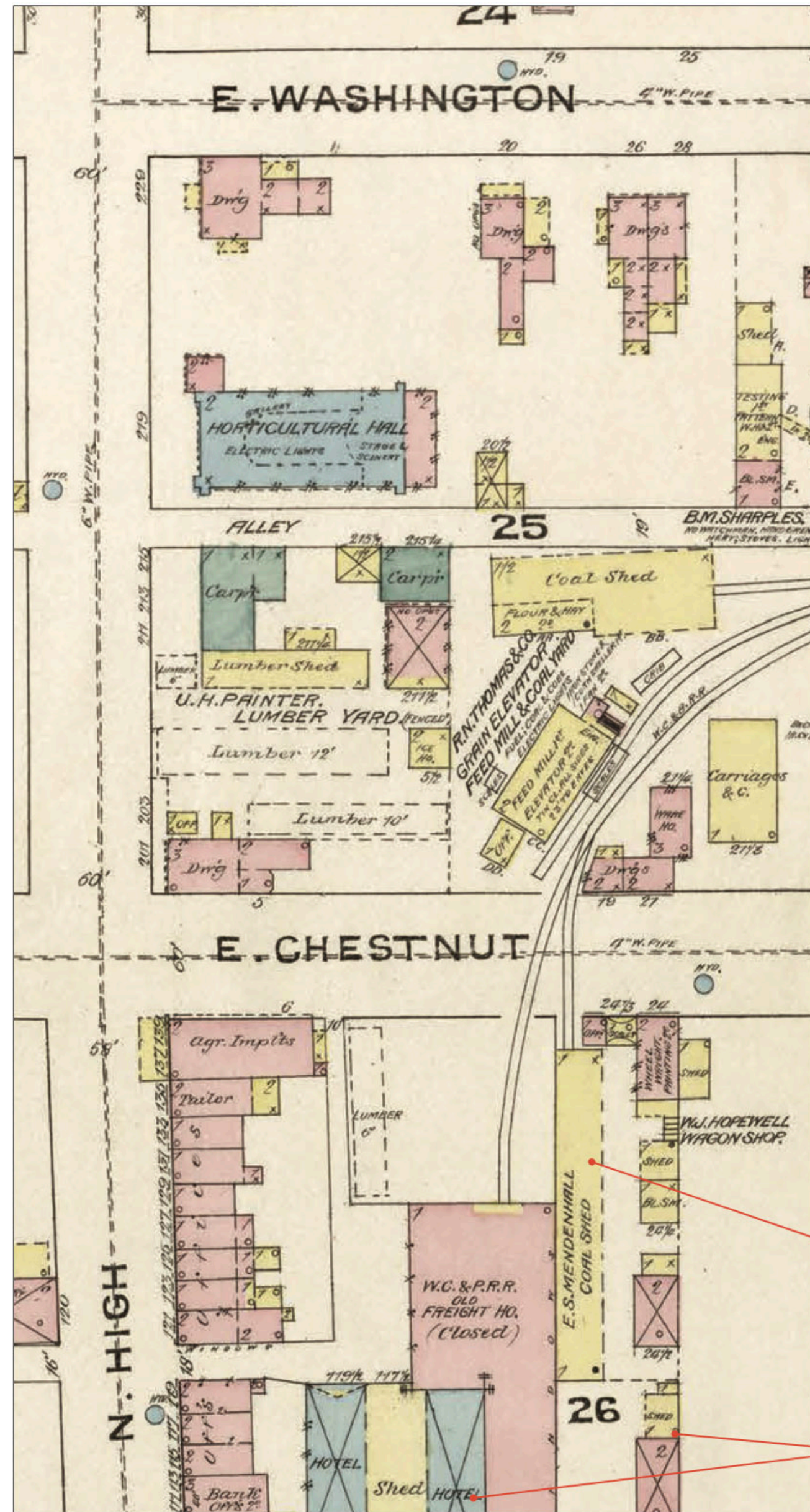
Notes: Organizations like the USGS created these, using contour lines to represent elevation. The closer the contour lines, the steeper the terrain. View old USGS maps at livingatlas.arcgis.com/topoexplorer/index.html.

Research uses

- Learning more about communities
- Understanding town histories
- Tracking land records

Notice how terrain affected human behavior. Settlers founded the city of Santa Fe at moderate elevations (i.e., where contour lines are farther apart on this map), rather than in the mountainous east (i.e., where contour lines are close together).

7 Sanborn Fire Insurance maps



DETAILS

Created: To assess buildings' fire risk for insurance purposes.

Notes: Sanborn maps are perhaps the most consistent and widely available geographical record, providing detailed information about towns and cities across the United States. Unlike other kinds of maps, Sanborn maps have a fairly standardized key (see an example below). The Library of Congress has a large, free collection of Sanborn maps on its website <www.loc.gov/collections/sanborn-maps>.

Research uses

- Finding land and property records
- Tracking ancestors' addresses
- Understanding a town's social history

KEY	
3	FIRE WALL 6 IN. AB. ROOF
×	SINGLE ROOF
•	COMPOSITE ROOF
○	BLK. OF THE ROOF
—	FRAME PARTITION
—	OPENING & IRON DOOR
—	WINDOWS " SHUTTERS
—	STABLE
—	WINDOW IN 1 ST STORY
—	" 1 ST & 3 RD "
—	" 2 ND & 4 TH "
B'LDGS COLORED YELLOW ARE FRAME	
"	RED " BRICK
"	BLUE " STONE
"	GREY " IRON
"	BROWN " ADOBE
"	GREEN " SPECIALS
Ⓢ	MARKED Ⓢ ARE CLOTH LINED
Ⓣ	INDICATE RELATIVE HEIGHTS
ALTERNATE STREET NO'S ARE ACTUAL	
CONSECUTIVE " " ARBITRARY	
—	BROKEN LINE NEAR B'LDG - WOOD CORNICE
—	SOLID " " METAL "

Sanborn maps often list the names of individual buildings, a huge boon for those looking for property records.

Buildings are colored to indicate the building material (stone, brick, iron, etc.). Notes show the structure's function.

Source: Library of Congress

GLOSSARY OF MAP TERMS

Term	Definition
aliquot parts	In a rectangular survey system, a subdivision of a section of land using directions and fractions to indicate the land's location: W½ SE¼ represents the west half of the southeast quarter of a township.
acre	Unit of land measurement equal to 43,560 square feet.
atlas	A collection of maps, usually from a specific country or region.
BLM	Bureau of Land Management, a government entity responsible for allocating parcels of land.
bounty land	Land granted by the Colonial or federal governments as a reward for military service.
contour lines	Boundaries on a map that indicate specific altitudes.
coordinates	Numerals used to objectively record a place's location on a grid, generally measured in degrees of latitude and longitude.
enumeration district	Divisions of each county and some large cities used to make census-taking more efficient and accurate. For large cities, the boundaries of enumeration districts often match those of wards or precincts.
gazetteer	A geographical dictionary; a book giving names and descriptions of places, usually in alphabetical order. If you can't pinpoint an ancestor's town, consult a gazetteer published during his lifetime.
homestead	A home on land obtained from the US government through one of several Homestead Acts. The homesteader agreed to live on the land and make improvements, such as adding buildings and clearing fields.
key	The section of a map that indicates what is meant by the map's various colors, lines, symbols or shading.
land grant	Public land given to an individual by the government, usually as a reward for military service.
latitude	A measurement of distance north or south of the equator, expressed in terms of degrees and minutes.
longitude	A measurement of distance east or west of the Prime Meridian, which passes through Greenwich, England.
map	A visual depiction of a place or region, generally drawn to scale and featuring icons, symbols or colors.
meridian	An imaginary north-south line; a principal meridian is the starting point for a rectangular land survey.

Term	Definition
metes and bounds	A land survey method employing compass directions, landmarks and distances between points.
plat	A drawing showing the boundaries and features of a piece of property; in genealogy, creating such a drawing from a metes-and-bounds or legal land description as a surveyor would have done.
public land	Land originally owned by the federal government and sold to individuals.
quarter section	In the rectangular survey system, one-fourth of a section of land, equal to 160 acres.
range	A row or column of townships lying east or west of the principal meridian and numbered successively to the east and to the west from the principal meridian.
rectangular survey system	The land survey method the US General Land Office used most often. It employs base lines, one east-west and one north-south, that cross at a known geographic position. In this system, townships—each generally 24 miles square—are described in relation to the base lines and subdivided into sections.
Sanborn	Shorthand for the Sanborn Map Co., an organization that created standardized maps for many towns and cities throughout the United States for insurance purposes. These maps are among the most complete and useful for researchers.
scale	The ratio used when creating a map, allowing the map to preserve a region's relative size. Map scales are given as ratios or fractions, such as 1:10,000, or one centimeter on the map representing 10,000 centimeters (100 meters) of land.
section	A division of land within a township that measures one square mile (640 acres)—about 1/36 of a township. Sections were further subdivided into half sections, quarter sections and sixteenth sections, or into lots.
state land	Land originally owned by a state or another entity, rather than the federal government.
topography	A study of a region's terrain. Topographic maps show an area's relief, or the changes in its terrain as measured by altitude.
township	In a government survey, a square tract 6 miles on each side (36 square miles); a name given to the civil and political subdivisions of a county.
tract	A parcel of land that isn't fully contained within a single section. Tracts within a township are numbered beginning with 37 to avoid confusion with section numbers.

Websites

Atlas of Historical County Boundaries

<digital.newberry.org/ahcb>

Bureau of Land Management General Land Office Records

<gloreCORDS.blm.gov>

Cyndi's List: Maps & Geography <www.cyndislist.com/maps>

Euratlas: Historical Maps <www.euratlas.net/history/index.html>

FamilySearch Wiki: United States Maps

<www.familysearch.org/wiki/en/United_States_Maps>

Google Earth <earth.google.com/web>

Google Maps <www.google.com/maps>

Historic Map Works <www.historicmapworks.com>

Historical US County Boundary Maps by Randy Majors

<www.randymajors.org/maps>

HistoryGeo <www.historygeo.com>

HistoryPin <www.historypin.org/en>

National Archives and Records Administration

<www.archives.gov>

Old Maps Online <www.oldmapsonline.org>

Perry-Castañeda Library Map Collection

<www.lib.utexas.edu/maps>

RootsMapper <www.rootsmapper.com>

The US Geological Survey <www.usgs.gov>

Using Maps in Genealogy

<www.census.gov/history/pdf/mapsgenealogy.pdf>

WhatWasThere <www.whatwasthere.com>

Books

The Family Tree Historical Maps Book by Allison Dolan and the Editors of *Family Tree Magazine* (Family Tree Books)

The Family Tree Historical Maps Book: Europe by Allison Dolan and the Editors of *Family Tree Magazine* (Family Tree Books)

The Family Tree Historical Atlas of American Cities by Allison Dolan and the Editors of *Family Tree Magazine* (Family Tree Books)

Map Guide to the U.S. Federal Censuses, 1790-1920 by William Thorndale and William Dollarhide (Genealogical Publishing Co.)

Walking with Your Ancestors: A Genealogist's Guide to Using Maps and Geography by Melinda Kashuba (Betterway Books)