

Problems Using 1950 Enumeration District Maps

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May 9th 2020 Revision

Introduction

On April 1, 2022, the 1950 U.S. census schedules will open to the public at a National Archives website. We expect there will be no name index at that time, so locational tools to find an address in the census will be the method for successful research. We foresee that people will mainly use either the 1950 census maps put online by the National Archives (<https://catalog.archives.gov/>), or/and the district definition datasets and some additional cartography resources on the One-Step site (<https://stevemorse.org>). This paper will discuss such maps, and some problems using them. We will share our experience of using thousands of such maps to help researchers recognize and understand situations they will certainly face. We conclude with how the One-Step 1950 datasets compensate for many of the problems we discuss here.

Why district maps? What is their main purpose?

The United States changed their procedures in 1880 for the mandated federal decennial census. Maps were now provided to census takers or “enumerators” who were no longer U.S. Marshalls, and those areas they were responsible for were called “Enumeration Districts”, abbreviated as EDs.

The main responsibility of ED maps is to define the area boundaries for the enumerator, not necessarily to define the streets within the boundaries. ED maps were created under several rules to avoid overlapping and to produce information tied to political units. EDs do not straddle city limits or other political lines like wards. This attention to accurate boundaries on ED maps apparently was more important than using a map that was current to 1950 street names and arrangements. As a result, you will see on most of these 1950 ED maps the following: “I certify that the corporate limits and ward boundaries shown on this map are correct as of ____” (usually the date of 1947 or 1948), and signed by the city clerk or other city official.

Where did the Census Bureau get their base maps?

The Census Bureau did not do their own field mapping in 1950. Instead they mainly relied on public agency maps. There was a concerted effort starting in 1947 to acquire or update the maps at the Bureau. The maps they were able to acquire came from postal maps, soil survey maps, city and county government maps, state highway department maps, Public Roads Administration maps, Coast and Geodetic Survey of the Dept. of Commerce maps, General Land Office maps, topographical survey maps prepared by the Geological Survey of the Dept. of the Interior, utility company maps, and if still needed commercial map companies. It's fascinating to see the variety of ED maps and what's written on them. One of our favorite map added writing, that is sure to become a classic, is the official ED map for College Park Maryland, home of the University of Maryland that you can see at: <https://catalog.archives.gov/id/16684208>. <https://catalog.archives.gov/id/16684208>

Some maps had to be drafted by Census Bureau cartographers from aerial photos, Sanborn insurance maps, documents or previous census maps. For example, the ED map for Milledgeville, Georgia has on it "Compiled from map by E. Teag City Engineer, information from aerial photographs, copy of original plan by Daniel Sturges 1908, map by DH Mitchells 1942, and other surveys. March 1946."

Once the Census Bureau felt they had a suitable map, they marked ED boundary lines and numbers on it that were used by census personnel for the 1950 count. Sometimes however those markings obscure the names of the marked streets. In addition to the maps, the Bureau produced text descriptions for each ED which were filmed and available at National Archives.

National Archive puts 1950 ED maps online

The National Archives started putting 1950 ED maps online in Sept. 2013 and announced the project on their 2016 Snapshot USA blog. There are now over 8,000 county and urban 1950 EDs maps accessible from their catalog. Their map sample includes "all county maps and any map that includes five or more enumeration districts." [We couldn't find on their site 23 county maps.] They went on to indicate the maps "provide the primary access to the population schedules, which are arranged by enumeration district." The maps are not privileged information and thus were made public for researchers at this time. The Cartographic Branch of the NA was the lead agency in the project and the maps reside with them at College Park, Maryland. National Archives also indicated that some of their maps were in such poor conditions that they were being treated by their National Archives Conservation Staff before they could be scanned. We will discuss one probable example later.

In order to access the maps directly from National Archives, do the following. Go to the National Archives catalog and enter your geographical area of interest. For example, "XYZ city 1950 census maps". When you get your results, click on the "Images" tab to reduce the number of results. You may still see a mixture of maps and

other graphics. Don't assume because your map isn't there on the first screen of results, that it is missing. If you don't see your map at all, then redo the search, except this time search on the county name that the urban area is in, e.g. "ABC County 1950 census maps" and look again. Perhaps you have misspelled the geographical area or there is a typo on the map index title. Later we will discuss the One-Step map tool and its capabilities.

Not your typical street map!

An urban ED map differs from those you are probably accustomed to using. Modern maps align North at the top of the map; ED maps don't necessarily follow that convention. Look for the arrow line that shows you where North is on the Census Bureau map. Current paper street maps usually have street indexes and grids, two things that would be very, very unusual for an ED map.

Modern maps show current conditions in an area. If you use a paper street map and it gets damaged and unreadable, you can buy another or just use digital maps. However, you are stuck with a 1950 ED map for an area, no matter it's condition. Some ED maps were planning documents and the plotted streets were never built, some are partially illegible, and many are ripped, taped, and torn. Current street names or even 1950 street names of the time may not match the street names on the "1950" ED map.

The date of the base map used for EDs may not be shown. You may see a date of 1947-1949 when the map was certified as to the reliability of the boundaries of the city and wards. The base map itself may have been created several years to a few decades earlier. It seems the smaller the urban population of an area, the more likely you will see a compiled map or an old graphic. Compiled maps drafted from multiple sources by Census Bureau cartographers seem to have a high number of misspellings, streets never built, and even wrong placement of streets and street names. Some of the typos are quite humorous; one of our favorites is from St. Joseph Missouri where Middleton became Nippleton on the compiled map.

The census taker in 1950 was warned about the maps they would be using. Their handbook states: "In some instances you may find that your map is not up-to-date." They had their own ED map covering just their responsibility in their portfolio, and sometimes an aerial photo if the boundary line between urban and rural areas was not clear from the descriptions.

At least the 1950 ED map material is better than what we had for the opening of the 1940 census. The 1940 maps were in black and white taken from scans off a National Archives film; the 1950 maps are in color. The 1940 map for example from Los Angeles County California had, on the same map, numbers for Assembly District, Supervisor District, Councilmanic District, Census Tract, and EDs. One had trouble telling them apart. The original 1940 map had them in different colors. The same Los Angeles

County area in 1950 shows only Census Tract and ED numbers on the color map, easily figured out.

Look for the legend or key on the map which might show the scale and date of map. The legend box should show the range of ED numbers covered by the map. It may show for large cities the ED prefix number (we will discuss later), and close by the box you may find special EDs (the S in a circle) denoting institutions within an ED but having their own ED number.

Remember these ED maps are from at least 72 years ago

The ED maps you find may not resemble what the area looks like today. Interstate Highways and other large transportation projects consumed large quantities of land and any residences on it. Cities grow and expand their limits. You may think your 1950 targets are within a specific city, only to find they were outside of its boundaries. For those cases, you are going to have to look at the County map for their ED number. Railroads played an important part of city commerce then, and many railroad tracks were the boundaries of 1950 EDs. Many of those tracks are now gone, replaced by green belts and trails. Small waterways may have been diverted, or channeled and those could also be district boundaries on the 1950 census.

Your map cannot be found on the Archives catalog?

If you can't find your ED map on the National Archives catalog, there are several possibilities. Let's look at some of them.

The map no longer exists or was not scanned. However, you may never know for sure. The map collection housed at the Cartographic Unit at College Park Maryland apparently does not have an online inventory of their maps. We did query them about Portland Oregon and its status because of the size of this 1950 city. We found out that it had been "pulled for preservation on 5/12/16". It is doubtful it will ever appear on the National Archives catalog. In 1970 it looked in poor condition. For those of you with Oregon targets, know that the University of Oregon in 1970 had made a complete set of photostatic images of the 1950 ED maps for their state. The microfilm of those maps is at the University library and we looked at it using interlibrary loan. A reference to the microfilm is at the end of this paper.

Your target area doesn't meet the five or more ED definition. Remember that the urban area maps put online by National Archives had to have at least 5 EDs. There are many communities below that mark, and many more unincorporated areas. All of them should at least be on their county map. Their names would not appear on the catalog description of the county map and thus not searchable unless someone added a "tag" to the record at the National Archives site.

The catalog Index has a misspelling of your map or has misplaced it or it has a bad link. We caught a number of these errors for our targeted sample and told the Archives about them, but some were never corrected. Let's look at St. Louis, Missouri (the city and county) for its 1950 ED map at the catalog. What makes this particularly difficult is that the misspelled name in the index is both on the city and county names.

If you had entered "1950 census maps St. Louis, MO" on the catalog on May 1, 2020, looked at the Images tab and the results, you wouldn't have found either the city or the county map, but you would have seen other maps of cities in St. Louis county. If you had entered "1950 census maps St. Loius, MO" you would have found both maps. Now it doesn't stop there. If you click on the city image set, you will see there are 4 maps. There are 4 maps for the city, but one is missing from this online set and apparently from the catalog, the small NE part of the city. Instead, map 4 under "St. Loius" is the ED map of St. Joseph Missouri which couldn't be found on the catalog index on May 1, 2020.

If one registers at the National Archives catalog, one is allowed to add "tags" and comments to objects in the catalog. Once added, tags become part of the search parameters of the catalog object. We tagged ten catalog maps with linkage/placement problems. However, there is an easier way to find these maps that will be discussed later.

Your map is hidden from the catalog index but is present in the catalog. Blame this on the Census Bureau who came up with a new 1950 statistical unit, the "urbanized area". The Margo Anderson reference we used defines it as "An area identified by the Census Bureau that contains a central place surrounded by a closely settled incorporated and unincorporated area. An urbanized area has a combined population of a least fifty thousand." We found that most political units encompassed by urbanized areas were Townships.

Let's use the example of Upper Darby Township, Delaware County, Pennsylvania. The population was 84,951 in 1950. It couldn't be found on the catalog (but we have tagged the map now). But if one searches for "Delaware County PA 1950 ED maps," then one sees the following entry which doesn't look like a typical entry: "1950 Census Enumeration District Maps – Pennsylvania (PA) – Delaware County – Urbanized Area, Vicinity of Philadelphia – ED 23-7 to 11, 23-15 to 17, 23-64 to 67, 23-89 to 129, 23-146..." and so on. Map 3 of the 12 maps in this result contains a good ED map of Upper Darby Township. There are dozens of urban areas hiding under "Urbanized Area" or "Vicinity" of major cities. Vicinity is another flag for these areas.

Another source of "hidden" EDs whose names won't be found on the title of the map may be county maps. St. Louis County Missouri is one such example. We have tagged about 160 of these "hidden" communities and their map number on the National Archives catalog. Our own map finding utility discussed later handles these in a different way.

“Invalid Enumeration District”

You have your ED # from the map corresponding to your address and are ready to enter it into some National Archives 1950 website. The program should then take you to the beginning schedule image for that number. If this was the 1940 National Archives census website, you might however see a rejection of your ED # as invalid. No other information would be given. What happened? What did your ED # look like? In 1930 the ED # format changed to consist of a two-part number. The first part specifies a region within the state, usually a county (but as of 1940 it could also be a large city). The second part specifies a district within the region. Therefore your 1950 number MUST be a double number. How might you have arrived at only a single number which always triggered that “invalid” message on the 1940 website?

Large cities have small ED areas. The ED number of those areas would be hard to read if the full ED # was shown, so only the LAST part of the number is shown. The prefix number may only be filled in on the first page of a multi-paged large city in the map legend (key). Again, you must enter both parts that make up the 1950 ED number into any search utility.

“Sorry we couldn’t find any results”

You have your two-part ED number, and for the 1940 census National Archives website, you enter it in the proper place, and get the negative search response above. They direct you to some reasons for it, but one of the main reasons (split EDs as described in the next paragraph) was not shown. Hopefully the 1950 version of the website will give people more explanations.

The 1950 ED maps were created a few years before the census was done. EDs areas in a sense are predictions as to how many people are in an area and whether an enumerator can complete his/her task within the required time period. But after the maps were drawn someone made a judgment that more than one enumerator was needed for a specific ED. If accepted, the ED was split into two or more parts. Say we had ED number 12-23; it was split to become 12-23A and 12-23B. Two separate parts that were non-overlapping. The parent ED, 12-23 no longer existed at that point. The ED maps do not show the splits. The ED definitions on a separate National Archives film series do show the splits after the initial information of the parent ED, and describe the boundary of the splits. We estimate about one in 35 city EDs in 1950 were split. Fort Worth Texas is an exception where almost one out of two EDs were split, many more than in two parts. You must enter the split ED # in the online search tool. Thus, if you entered 12-23 and got a no result error, try entering 12-23A and see if that works. If an ED was missing, you may also get a no result message, but that is a very unusual situation. Of course, a mis-entered ED number would also be rejected.

The One-Step Tools and Compensation for Map Problems

Since 2002, the One-Step site has accumulated locational tools for searching the 1880 through 1940, now 1950, federal censuses. For 1950 we set our urban coverage goal at communities having 5 or more EDs and over 5,000 in population. We produced over 230,000 transcriptions of ED descriptions taken from 38 National Archives films we scanned ourselves. Films were from several libraries and obtained through inter-library loan. Those scans were put on the One-Step website in 2013.

With the use of ED maps (mostly from NA) we created lists of streets (text files) within each ED in an urban area. These street-list files are used by the One-Step location tools. The strength of the One Step strategy is that it is much easier to determine an ED by searching these text files than by searching through graphic map files. Our main utility is called the “Unified” tool and is accessible at <https://stevemorse.org/census/unified.html>. Here are some advantages we have over the map problems discussed earlier.

Whenever we detected a misspelling of a street name (or other entity) on an ED map, we entered the correct spelling into our street-list file. If we found from proofing the file that a street had been renamed, we often entered both the old and new name into our street-list file. We were able to fill in illegible or damaged parts of an ED map from other map sources that we either owned, found online, or got from library requests. And we sometimes added street names not on the ED map that we thought appropriate.

It may be a challenge to locate an address on large city ED maps. Chicago for instance has 23 pages of ED maps. You have to find the right page, without help from a map index. Then you need to find the right street name, and because address numbers are not shown on this ED map, the nearest correct cross street. It would be easier if you were looking for a large ED # gotten with the One-Step tools rather than small print street names.

The ED definitions for 1950 excluded many unincorporated community names that were shown on the 1940 definitions. In addition, such communities are generally not searchable on the National Archives catalog for map information. We went through about 4,700 1950 county ED maps and added about 79,000 additional small community names from them to the searchable ED definitions. You don't have to know the county your area is in, just the state, to hopefully find the ED # of your small area. You can then find the county map and locate the ED # on it to confirm the community is there.

We have our own ED map finding tool at <https://stevemorse.org/census/arc1940-1950edmaps.html?year=1950> which should be simpler to use than the National Archives catalog. It has been programmed so that if you enter a “hidden” city name, it directs you to the map. If the entered name has typo/linkage/misplacement problems and we know where its map resides, it will take you to that map. No separate “tag” search is needed. You won't even know there was a problem with your map search.

As for ED maps that are apparently missing, we made our own maps from vintage maps or 1950 Census Bureau Block maps (from Housing Reports) for over 15 urban areas of over 20,000 (4 over 100,000). Their streets are searchable through our "Unified Tool". We put five of the created maps on our map utility. They are Charleston NC, Jersey City NJ, New Haven CT, Portland OR, and Worcester MA.

The lack of the census prefix and the situation of split EDs are not a problem on the One Step search tool results. We know where all the splits are from the ED definitions, and the program should always give you the right format of the ED number.

We acknowledge the help of Debbie Terman who reviewed an earlier draft of this paper.

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