

Memphis Property Hub User Guide

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Section 1 - What is the Memphis Property Hub?

The Memphis Property Hub was developed by the [Blight Elimination Steering Team](#) as a tool to share parcel-level data with the greater Memphis community. This data provides details on ownership, tax delinquency, potential electricity disconnections, zoning, code enforcement, etc. and can be used by individuals or organizations working to resolve problem properties in Shelby County. The online PolicyMap tool is used visualize data from the Memphis Property Hub, allowing users to analyze and present information without the use of computer programming techniques to sort through large quantities of data.

PolicyMap users can browse, search, and download all the data from the Memphis Property Hub collection, as well as other data sets included in the PolicyMap tool. Users can upload their own data into PolicyMap as well, allowing visualization of data that may interest them but is not included in the tool. Users may also generate neighborhood reports using this tool, which automatically compile information on demographics, land ownership, code violations, and more within a certain area.

The purpose of this tool and the open data access it provides is to allow Memphis residents, community organizations, and officials to make data informed decisions to improve our community. Abandoned, dilapidated, and deteriorating properties have a negative influence on neighborhood safety, health, outlook, and market potential. The Property Hub tool contains data that approximates the number of vacant and abandoned properties in Shelby County. Interested individuals and organizations can use this data to assess the scale of blight in

their neighborhood, contact owners of investor-owned properties, track the occurrence of code violations, and strategically target problem properties.

Section 2 - Gaining access

At this time, our data providers require that only select users gain access to the Memphis Property Hub Data. To access the Property Hub tool, you will first request an account [here](#). If your account is accepted, you will receive an email from PolicyMap asking you to set up a password. Once your account is set up, you may login at memphisfightsblight.policymap.com.

Section 3 - Memphis data

Once you are logged into PolicyMap, you may display the Memphis Property Hub data by clicking the Memphis Data tab in the top left corner of the gray tab bar. You will see a pop-up menu with three sections, including: Data Layers, Data Points and Polygons, and Data Loaded by Me or Other Users. We will walk through each of these categories step by step.

Data layers gives information about vacancy, building permits, utility disconnections, and more, collected at the block group level. If you are unfamiliar with block groups, this is an area with a designated boundary that is slightly smaller than the census tract and is often used to represent neighborhoods. As an example, select Shelby County Tax Sale Properties from this tab. You can then choose the year and the variable you wish to display. The percent variable color codes each block group according to the percentage of Shelby County Tax Sale properties that reside in that area, while the number variable color codes according to the number of Tax Sale properties in that area. You can also color code by the percent change of Tax Sale properties since the previous year. Notice that you may also change the shading color or ranges to produce a map to your liking.

Data Points and Polygons contains information on Memphis 3.0 planning districts and Memphis properties, which is where the parcel-level data is stored and will be our focus in this section. Memphis Properties is divided by year and then by month. As an example, load the data from August 2018 by hovering over 2018 Data and then clicking on Memphis Properties (Aug 2018). You will now see a screen full of data points containing information about each parcel, or plot of land, in Shelby County. Click on any of these data points and a popup will appear displaying the Parcel ID, address, zip code, zoning information, and coordinates of this parcel. Browse through the data tabs in this popup to explore information regarding code enforcement requests, ratings from the Bluff City Snapshot (detailed in Section 9), property taxes, potential utility disconnections, and more.

In its current state, this data can only provide an overview of property information and is quite overwhelming to look at. To be more useful, we will sort the data using the Filter

points button. As an example, suppose that we are only interested in residential properties. To filter for this, we click through Filter points > Assessment Class > Residential. The number of points on your screen should have decreased a fair amount. Now supposed we further wish to filter by the assessed value of the property. We can combine these two filters by clicking Appraised Value > \$10,000 or less, for example. You are now seeing only the residential properties that are worth \$10,000 or less. Try to filter for properties with 3-7 service requests within the August 2018 data on your own.

Data Loaded by Me or Other Users contains the data that you upload or that other users have uploaded and made publicly available. We will further explore this in Section 6.

Section 4 – Adding custom and existing boundaries

You may be interested in viewing data only in a defined region, such as your zip code or neighborhood. Creating regions of interest can help decrease the file size when downloading data, generate accurate neighborhood reports, and focus your attention during data exploration. To view map boundaries already available on the tool, click the Map Boundaries button in the bottom right. Here you can load boundaries such as zip codes, Memphis neighborhoods, or areas of high flood risk. Explore these boundaries for a few minutes before moving on, noting how too many overlapping boundaries can create a confusing map.

If the boundaries you are interested in are not stored in PolicyMap, you may create your own boundary. Click on the purple Create button on the lower right-hand side. You can choose to draw a boundary, assemble multiple regions, or create a radius around a single area. By clicking on your preference, you will receive instructions on how to continue in creating and naming your boundary. Once it is created, it can be accessed via the purple My Saved Custom Regions popup tab.

Section 5 – Downloading data

Some users may wish to download data in order to analyze it in another program or explore the data table. For this example, we will begin by loading the Memphis Properties data from August 2018. If you don't remember how to do this, review Section 3. Once the data points appear on your screen, apply any filters you may need to narrow the data down, if applicable. Next, click the  button in the top right corner, indicating you wish to download this data. Step 1 then verifies the data you wish to download, which should be Memphis Properties (Aug 2018). Hitting next, the tool will ask you to specify your region of interest. You may use a pre-defined location, such as a city or zip code, or a custom region if you have created one. Next, you just confirm your download. The download may take a few minutes, especially if you have

not filtered the data or have downloaded over a large area, but it will appear in your downloads once successful as a .csv file, which may be viewed in Microsoft Excel.

Section 6 – Uploading data

You may also wish to upload your own data into the Property Hub tool for analysis or map making purposes, such as data on the condition of properties in your area. To do this, you may start out with an Excel file like the one shown below. The most important fields to appear in your excel file are the address, city, state, and zip code. These columns will allow PolicyMap to place your data in the proper location on the map. To upload this spreadsheet, you will first need to save it as a .csv file by going to Save As and choosing .csv as the file type.

Address	City	State	Zip Code	Condition
1234 Blossom Lane	Memphis	TN	99999	Poor
1000 Cherry Peak Drive	Memphis	TN	99999	Good
333 Maple Wood Circle	Memphis	TN	99999	Good
18 Chestnut Road	Memphis	TN	99999	Poor

Click on **Data Loader** in the very top toolbar of PolicyMap – directly below your internet search bar where the web address appears. First click **Upload a Spreadsheet of Points** and then give your dataset a name. You can then choose to share the data set with all Property Hub users, certain other users, or only yourself. You may change the shape, color, and size of the data marker for your upload, and then select the .csv file from the **Browse** button. When you click next, ensure that PolicyMap has picked up on the proper address, city, state, and zip code columns. Clicking next, the green dots in the column **Geocoded** will indicate the properties that have been placed on the map. If a red dot appears in this column, PolicyMap was unable to recognize the address information. That address information should be double checked and can be edited directly in this screen by double clicking the incorrect information. Once all rows are green, you may click **save and close**, and the data points should appear when you return to the **Maps** tab.

Alternatively, you may wish to upload data by clicking on locations instead of uploading a spreadsheet. You will then click **Data Loader > Add Points Directly to Map** and proceed through the remaining questions as instructed above. You may add data points by clicking directly on the map or by entering addresses, hitting **Save and Load Dataset on Maps Page** when finished. Any data set you upload, by spreadsheet or adding points directly, can be displayed in the **Maps** tab at the very top of the screen by clicking **Memphis Data > Data Loaded by Me or Other Users**. To edit data you have previously uploaded, return to the **Data Loader** and click on the tab **Access / Edit My Datasets**.

Section 7 – Map creation

If you would like to create maps that are print ready, load the data that you are interested in displaying on the map. Apply any filters you wish to display on your map and ensure that your data is presented as you would like it to be printed. Next, click the  button in the top right corner to proceed to the print display. You may then enter a map title, choose the file name, determine whether your map needs a legend, and edit the text size. Once your map is satisfactory, simply click the Export button and your map will appear in your downloads file. Note that this process may also take a few minutes depending on the file type and size.

Section 8 – Neighborhood report

Some PolicyMap users may be less interested in digging through the data and prefer a comprehensive report of their area of interest. This is also a useful way to gain a high-level exposure to the vast quantities of data stored within PolicyMap. To generate a neighborhood report, first click on the Reports tab at the very top of the page. You may then enter your location of interest or a custom region you have already created to generate the report. You are then free to explore the report, containing analyses of how your area of interest compares to the county and state in topics such as income level, household type, vacancy rate, employment, and more.

Section 9 – Approximating blighted properties

One of the most frequently asked questions regarding Memphis Property Hub is how to use this data to locate and estimate vacant and abandoned properties in a given area. Sadly, this is no simple task. Vacant and abandoned properties are characterized by many indicators, and the only sure way to determine vacancy is to physically examine the property. However, a few indicators within the Memphis Property Hub are useful indicators. If you haven't already, load the August 2018 Memphis Properties point data and remove all filters. We will filter for the most useful indicators of neglect and abandonment. The first indicator is found by clicking Filter > Potential Investor-Owned Property > Yes. This filter shows property where the owner does not live at the given address, according to tax records. However, this does not mean that the property is problematic, as it could just be a rental unit that is well maintained.

Next, we will filter for potential electricity disconnections following the same steps as for potential investor-owned. These are properties who have had their electricity disconnected within the last 90 days. However, this may be for reasons other than vacancy or nonpayment, such as a renter moving off the property. Other important indicators are the delinquent city and county taxes and the number of service requests from code enforcement. Abandoned properties are often delinquent on property taxes due to bad investment, uncertain ownership,

or intentional neglect. These properties are often characterized by many service requests as neighbors report them to the [311 system](#) for issues such as tall grass or dilapidated structures.

Lastly, the Bluff City Snapshot information may be a useful tool for approximating derelict or vacant structures and property. The Bluff City Snapshot was a window survey performed in 2015, with surveyors rating Memphis properties on a scale of 1-5 according to their condition. In this study, 5 means the property is in very poor, none-livable condition, while 1 means that the property shows no sign of neglect. While somewhat outdated, this rating may still be useful to identify abandoned property. The Bluff City Snapshot ratings can be filtered for using the Rating filter.

Section 10 – PolicyMap Data

We have thus far mainly focused on the data stored within the Memphis Property Hub, under the Memphis Data tab. However, PolicyMap offers a wide variety of data down to the block group level that we have yet to explore. This data is stored in the gray tab menu alongside Memphis Data. Here, you can explore data on race, home sales, crime, jobs, life expectancy, and more. These tabs house data that may be useful to support or explain data you find at the parcel level within the Memphis Data tab. With the skills you have learned thus far, we encourage you to explore this data to see what trends and relationships you find for Memphis communities.

If you have any further questions about the Property Hub tool, please reach out to Casey Middleton at casey@npimemphis.org.