factlook

USER MANUAL

Version 2.0.2

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FactLook lets you quickly and easily transform raw data into stunning, thematic maps at a fraction of the cost of similar software products. This manual will help you quickly start building maps, provides info about the software's features and functions, and offers guidance should you have questions or need support.

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Introduction

Browser / Technical Requirements

FactLook is a dynamic web-based application. You will need a suitable internet connection in order to use the application. FactLook works best on the following browsers:

•   Chrome   •   FireFox   •   Safari

Registering to use FactLook

To use FactLook you'll first need to choose a pricing plan and register. You will need to have a valid credit card and an active email address that you can use to validate your registration request.

From the home page, choose "Register", or go to the Pricing page and choose the plan that fits your needs. After completing the payment process, you will be redirected to the sign in page for access to your account.

Plans & Pricing

FactLook offers three subscription-based pricing plans: Basic, Standard and Pro. All plans renew each month automatically unless you choose to cancel the subscription. The credit card you use to sign up will automatically be charged each month.

Basic

Your spreadsheet has just a few hundred rows of data. Our Basic plan is the way to go.

• 2000 datapoint credits per month allowance
• Unlimited map templates
• $15 per month
• Additional datapoint credits can be purchased in
  packages of 2,000 for $10 each

Standard

Choose Standard if you work with spreadsheets with hundreds of rows of data and plan on updating your maps a few times each month.

• 10,000 datapoint credits per month allowance
• Unlimited map templates
• $35 per month
• Additional datapoint credits can be purchased in
  packages of 2,000 for $10 each

Pro

Working with spreadsheets with thousands of rows of data or metrics and plan on making multiple new maps each month? Go Pro for the best value.

• 40,000 datapoint credits per month allowance
• Unlimited map templates
• $120 per month
• Additional datapoint credits can be purchased in
  packages of 2,000 for $10 each

Which plan is the best for you?

Short answer: Look at your spreadsheet(s) and add up the number of rows of data. The total number of rows equals the number of datapoint credits you'll need to build your map.

FactLook pricing is based on the use of datapoints: a single datapoint is equal to a single visible element on a map. That element could be a county, state, ZIP code, census tract or even a specific street address (GeoCoding). Every monthly plan comes with an allowance of datapoint credits. It takes one datapoint credit to build one feature on your map.

For example, let's say you have a spreadsheet with a single column of data for the number of people bitten by dogs in every county in the state of Texas. Texas has 254 counties and you have 254 rows of

data — a value for each of those counties. You will need 254 datapoint credits to build your map.

If you are building a map with less than 1000 rows of data, you most likely will want to choose the Basic plan. If you will be building multiple maps with many thousands of rows of data, you may want to look at the Standard or Pro plans which offer larger datapoint credit allowances.

Purchasing Additional Datapoint Credits

In the event you exceed your monthly plan's allotment of datapoint credits, the FactLook wizard will alert you that additional credits are required to continue. Follow the prompts for purchasing additional credits.

Credits are sold in packages of 2,000 for $10. Unused credits will rollover to the next month.

Datapoint credit cost is subject to change per the FactLook terms of use, which can be found here: http://factlook.com/terms.html.
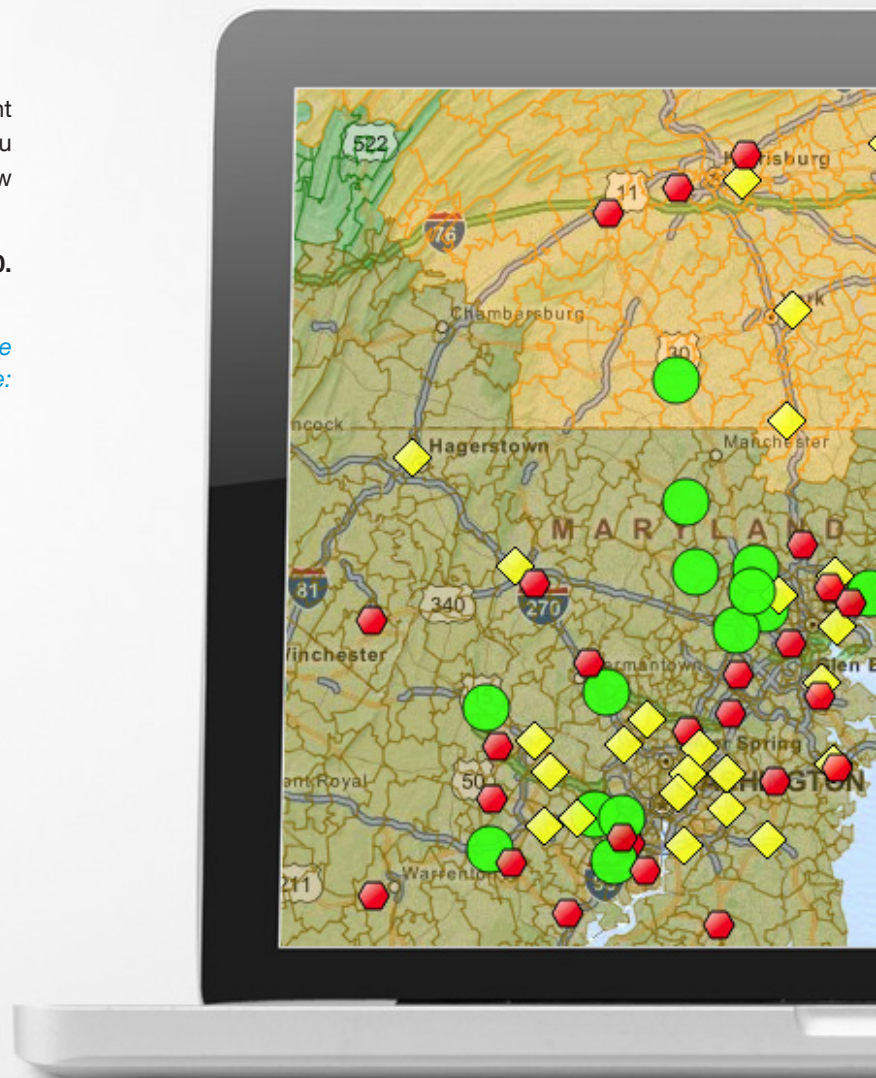
Overview

Process

Building a thematic map in FactLook couldn't be easier. Below are the basic steps. Details on how to complete each step begin on page 7.

1. Choose the geographic settings for the base layer of your map.

Your options include: U.S. states, counties, ZIP codes, congressional districts, census tracts, street addresses, latitude / longitude coordinates, and custom areas.

2. Copy and paste data from your spreadsheet into the FactLook wizard.

A basic understanding of how spreadsheet programs work is important. You'll want to make sure your data is formatted to match the data grid settings in FactLook. Then, simply copy the data cells from your spreadsheet and paste into the FactLook data grid. Select "Finish" to generate the base layer map and first geographic layer.

3. Apply styles.

FactLook lets you adjust data breaks (the number of groups the overall data range is divided into) colors, borders and opacity settings, customize legends and other elements to make your map look just the way you want it.

Formatting your Data

As previously mentioned, it's important that your spreadsheet data is formatted to match the layout of the FactLook data grid.

For example, let's say you are going to build a map displaying data for all 50 U.S. states. The FactLook wizard displays the U.S. states in alphabetical order. If your spreadsheet is not organized alphabetically, the data you paste in will not be matched with the alpha-ordered states in the FactLook data grid.

The following table shows the default organization of geo-labels in the wizard:

Table 2.1: FACTLOOK WIZARD: Geo-Label Default Layout

- STATES - COUNTIES	Alphabetical (Alabama, Alaska, Arizona, etc.)
- ZIP CODES - CENSUS TRACTS - CONGRESSIONAL DISTRICTS	Sequential (40205, 40206, 40225, etc.)
- LOCATION / STREET ADDRESS - LOCATION / LATITUDE, LONGITUDE - CUSTOM AREA	N/A, as blank grid is displayed and data will be pasted into first and only cell

Overview (continued)

The FactLook Dashboard – Overview

After signing into FactLook, you will land at your FactLook dashboard. The dashboard is a centralized workspace where you can quickly view the maps and datasets you recently worked on.

1. Create new maps.

Create a new map by selecting the "+" icon beneath My Maps or by selecting Maps from the top nav and then choosing File > New.

2. View all of your maps.

To view all of the maps you've created listed in chronological order, select "Maps" from the top nav.

3. View all of your datasets.

A dataset is a collection of values you have brought to FactLook from a spreadsheet or by entering them manually. FactLook saves your datasets so you can re-use them in future maps. Re-using saved datasets does not affect your monthly datapoint credit balance.

4. View and change your account settings.

Go to Settings to change your password and view your datapoint credit balance.

See "Account Settings" section on page 28 for more information on changing your account settings.

FactLook User Interface: Key elements

Creating a Map

Creating a New Map

From the FactLook dashboard, create a new map by selecting the "+" icon beneath My Maps or by selecting Maps from the top nav and then choosing File > New.

1. Give your new map a name.

We recommend using a name that's descriptive of the data and geography being shown (e.g., Dog Bites, Alabama - County.)

2. Select geography type.

This selection will establish your map's base geography layer. The geography type you'll want to choose is dependent upon the data you want to display. If, for example, your data is general population for multiple U.S. states then you will choose the State geography type. If you data is for counties within one or more states, you will choose the County geography type. The available geography types in the FactLook wizard are:

· **U.S. States**

· **U.S. Counties**

· **U.S. Census Tracts**

· **ZIP Codes**

· **U.S. Congressional Districts**

· **Location / Street Address**

· **Custom Area (based on multiple geographies)**

· **Location / Latitude, Longitude**

3. Narrow geography type.

You'll now be asked to refine your choice of geography type. Again, this choice is primarily based on the data you want to display on the map.

The chart on the following page shows your path through the FactLook wizard based on your selection of geography type. In the main portion of the wizard, the paths are similar except for the the Location / Street Address, Location / Latitude, Longitude and Custom Area geography types. Use the top left check box to select all options within a geography type.

FactLook Wizard: Select geography type

Creating a Map (continued)

Table 2.2: FACTLOOK WIZARD: Paths and Steps Required – (for all geographies, using the top left check box for the column selects "all" within a category: states, counties, census tracts, etc.)

U.S. STATES	1. Select all or any combination of states. 2. Paste data from spreadsheet into FactLook wizard (value column).
U.S. COUNTIES	1. Select the state or states in which the counties are located. 2. From the state(s) selected, indicate which counties you want to display. 3. Choose all or any combination of individual counties. 4. Paste data from spreadsheet into FactLook wizard (value column).
U.S. CENSUS TRACTS	1. Select the state or states in which the census tracts are located. 2. From the state(s) selected, indicate which counties you want to select census tracts. 3. Choose all or any combination of individual census tracts within your chosen counties. 4. Paste data from spreadsheet into FactLook wizard (value column).
U.S. ZIP CODES	1. Select the state or states in which the ZIP codes are located. 2. From the state(s) selected, indicate which ZIP codes you want to display. 3. Choose all or any combination of individual ZIP codes. 4. Paste data from spreadsheet into FactLook wizard (value column).
U.S. CONGRESSIONAL DISTRICTS	1. Select the state or states in which the congressional districts are located. 2. From the state(s) selected, indicate which congressional districts you want to display. 3. Choose all or any combination of individual congressional districts. 4. Paste data from spreadsheet into FactLook wizard (value column).
LOCATION / STREET ADDRESS	1. After selecting "Location / Street Address", you will see a blank data grid. 2. Paste the raw data from your spreadsheet into the first cell for each location you would like to see on the map (divided into street, city, state, zip columns). 3. Include any column headers or labels from your spreadsheet, as these can be used later to identify certain required values. 4. Paste data from spreadsheet into FactLook wizard (blank cell "A"). 5. Set Required Values for unique identifier for each location, along with address info and initial metric to be applied to each marker on the map. 6. After validation screen, click "Finish" to see the results on the map.

(chart continued on next page)

LOCATION / LATITUDE, LONGITUDE	1. After selecting "Location / Latitude, Longitude", you will see a blank data grid. 2. Paste the raw data from your spreadsheet into the first cell for each location you would like to see on the map (divided into latitude / longitude columns). 3. Include any column headers or labels from your spreadsheet, as these can be used later to identify certain required values. 4. Paste data from spreadsheet into FactLook wizard (blank cell "A"). 5. Set Required Values for unique identifier for each location, along with latitude / longitude info and initial metric to be applied to each marker on the map. 6. After validation screen, click "Finish" to see the results on the map.
CUSTOM AREA	1. After selecting "Custom Area", you will see a blank data grid. 2. Paste raw data from your spreadsheet into the first cell for all geography shapes you would like to see on the map (must be within same geography type / ex: counties, zip codes, etc). 3. Include any column headers or labels from your spreadsheet, as these can be used later to identify certain required values. 4. Paste data from spreadsheet into FactLook wizard (blank cell "A"). 5. Set Required Values for geography type, GeoID for the shape reference, and initial metric to be applied to the shapes on the map. 6. After validation screen, click "Finish" to see the custom area defined on the map.

Required Values screen for Location / Street Address selection (Key Field identifies each location)

Select columns to use for required values

Key Field	Store Number
Initial metric value column	Packaged Goods
Street Address column	Street Address
City column	Store City
State column	State
Zipcode column	Zip Code

Creating a Map (continued)

Required Values screen for Location / Latitude, Longitude selection (Key Field identifies each location)

Select columns to use for required values

Key Field	Case Number
Initial metric value column	Beat
Latitude column	Latitude
Longitude column	Longitude

Cancel   Previous   Next

You must set the initial metric value (numeric values only) column in order to proceed with the map creation process.

Required Values screen for Custom Area selection (GeoID field defines shapes)

Select columns to use for required values

Select Geography Type	Zip Codes
Select GeoId field	Zip Code
Select initial metric value column	Quarterly Sales Data

See "Advanced Features: GeoCoding and Custom Areas" on page 18 for more info regarding these Required Values settings and definitions.

Creating a Map (continued)

Entering Data

FactLook offers two ways of entering your data for display in a thematic map.

1. Copy and Paste from a spreadsheet
   (recommended method)

2. Enter manually into the FactLook table display

Both options become available in the creation of a new map once you have selected the Geography Type and further refined your selection.

Before copying and pasting data from a spreadsheet into the FactLook table display, first check that your data is formatted so that your rows of data match the layout of the geography types in the FactLook data grid. (See page 5 of this guide for more info.)

1. Copy the values you wish to display from your spreadsheet by selecting the entire column of data (do not include the column headers from the spreadsheet for basic geography templates; do include them on Location and Custom Area templates) and then choosing Copy.

2. In the FactLook data grid display, click the first cell in the column "Value" and paste your data using either "Command+V" on Mac or "Control+V" on PC. Your data should automatically display in the Value column.

To manually enter data, simply click inside the first cell beneath the Value column in the FactLook data grid display and type your first data value. Continue down the column, typing your values in the succeeding cells.

When you have finished entering data, select "Finish" for the FactLook wizard to create your map. By default, the style settings are set to the following:

• Data breaks: 4

• Color scheme: Blue

• Break by: Equal size data ranges

• Default marker: Circle (for GeoCoded location-based layers only)

Map View

You'll arrive at the Map View after having entered data in the creation of a new map (using the wizard and clicking "Finish"), or by having opened a previously-created map from your dashboard.

There are several features accessible through the Map View that are important to understand. These features will allow you access to controls for changing the appearance of your map, changing or editing data, adding additional datasets, renaming your map, and more (see image on next page).

Example of default settings generated when creating a new map

Enabled	Property	Break 1	Break 2	Break 3	Break 4
	Legend text	6 % - 13 %	13 % - 20 %	20 % - 27 %	27 % - 34 %
	Decimal points	0	0	0	0
	Minimim Value	6	13	20	27
	Maximum Value	13	20	27	33.8
	Include Minimum Value	✔	✔	✔	✔
	Include Maximum Value	✖	✖	✖	✔
✔	Fill Color	#BFCCE5	#7F99CC	#3F66B2	#003399
✔	Fill Opacity	75%	75%	75%	75%
✔	Border Width	1	1	1	1
✔	Border Color	black	black	black	black
✔	Border Opacity	100%	100%	100%	100%
✔	Show Border	✔	✔	✔	✔

Creating a Map (continued)

FactLook Map View — Features and Functions
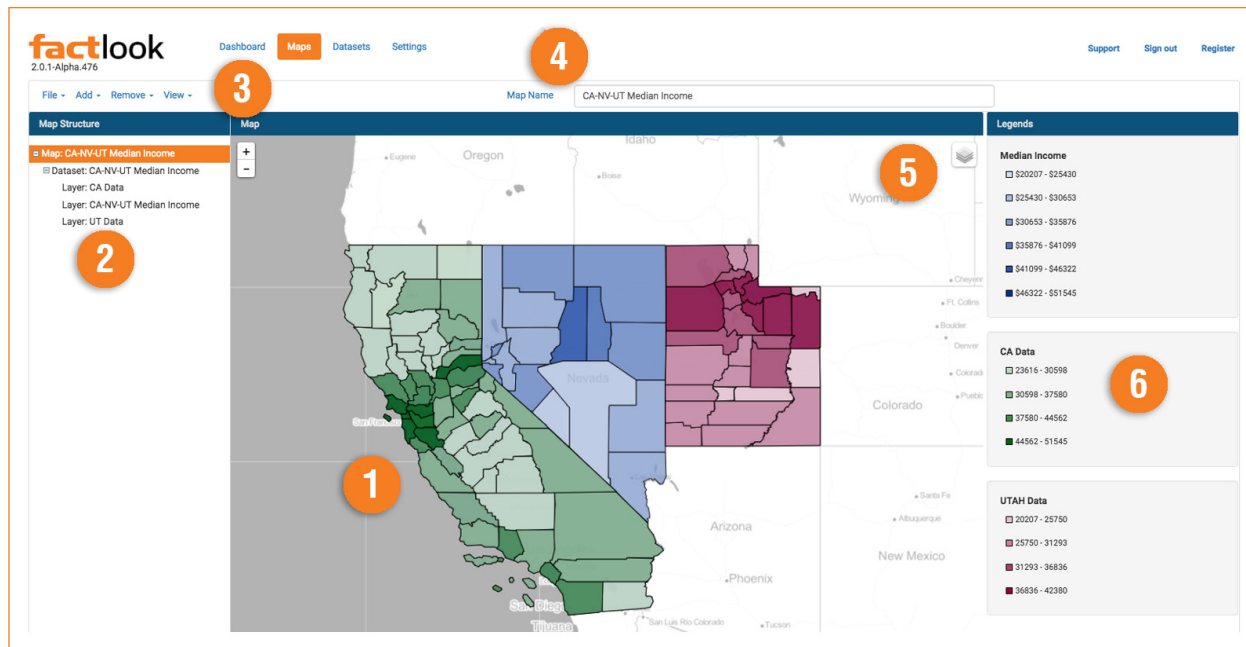
1. Map

This dominant image in the center of the Map View is the map generated from the selections you made and the data you provided. Use the +/- control in the upper left corner to zoom the view in or out. You may also zoom in by double-clicking on the map itself.

2. Map Structure

The Map Structure is a hierarchical rendering of the elements being used in the creation of the map. In the example above, the map has three datasets and one layer associated with each dataset (datasets can have multiple layers). You may access each of these elements and switch between them by simply clicking on the name (Map, Dataset or Layer).

a. Dataset: The dataset is the raw data you entered into the FactLook data grid. To access that data at any time, click on the word Dataset. If you will be using this dataset in the creation of additional maps we recommend changing the name of the dataset to a descriptive name that will be easier to reference later.

b. Layer: The layer contains the style properties for the data and geographies (color, border width, opacity settings, etc.) associated with this map. To change those properties, click on the word "Layer" to see the layer settings screen.

3. Navigation

The top-level navigation provides access to several functions associated with the current map being displayed, as well as offering shortcuts to building new and viewing previously-created maps.

Creating a Map (continued)

a. File:

1. New: Use to create a New Map.

2. Open: Open a previously created map.

3. Save: Save changes to the current map.

4. Save Image: Saves a .PNG file of the current Map View to your device.

b. Add:

1. New Dataset: Your maps can contain an unlimited number of datasets. Use this option to add another dataset and layer to the current map.

2. Existing Dataset: Add a previously-created dataset to the current map.

3. New Layer for Dataset (menu item is active with a dataset selected in Map Structure): Datasets can be filtered to create additional layers for that dataset.

For example, say you have pasted in data for population count in California, Oregon, and Nevada by their counties. You could then select the dataset and filter the results to show only the data for California counties by using the drop-down sorting tool seen above each column. Click "OK" to filter the data and then add a new layer for the dataset based on this selection of California counties (See following images for example).

Filtering a dataset

Adding layer for dataset based on filter
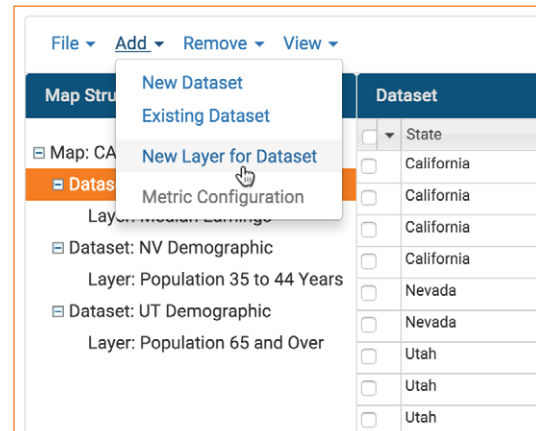
4. Metric Configuration (active with a layer selected in Map Structure): By default, each shape or location marker has one metric assigned to it. Multiple metrics can be applied to shapes or markers by adding a new metric configuration within the layer settings screen. Note: the geometric shape setting for markers works best with a single metric, and the bar chart setting works best when multiple metrics are being displayed.

a. Remove:

1. Dataset (active with a dataset selected in Map Structure): Select the dataset(s) you wish to delete.

2. Layer (active with a layer selected in Map Structure): Select the layers(s) you wish to delete.

3. Metric Configuration (active with a property set tab selected within the layer settings screen): Select the metric configuration(s) you wish to delete.

a. View:

1. Structure: turn the map structure on/off within the overall user interface.

2. Legends: turn the legend(s) on/off within the overall user interface.

Creating a Map (continued)

4. Map Name

This is the name you gave the map in the first step of the map creation wizard process. You may change it at any time by clicking on the Map Name, entering the new name, and clicking return or enter on your keyboard. Note: when entering text into any field in FactLook, clicking return or enter will save the change and toggle to the next field.
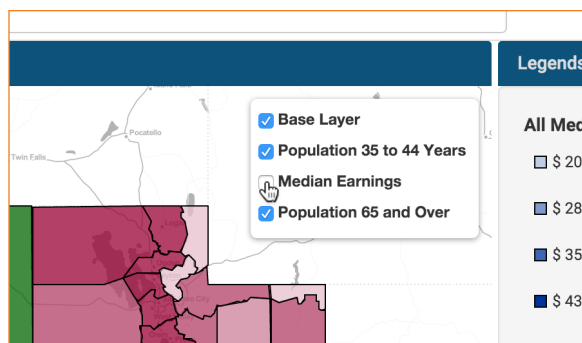
Changing the map name within map view
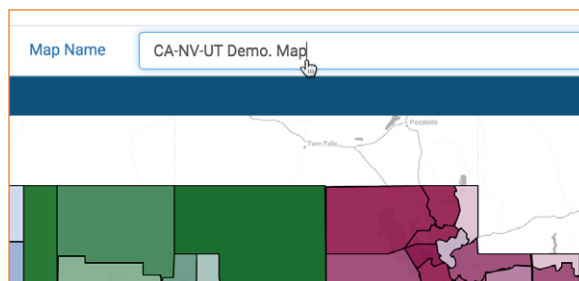
5. Layers Control Button

Click the Layers Control to view all of the layers being used in the Map View. You may selectively turn on and off layers to change how the map is displayed.

Layers control on map view

6. Legend Display

The Legend Display contains the map legends for each layer, as defined on the layer settings screen(s). Maps with multiple datasets and layers will display multiple legends. To change the number of breaks, colors, and the legend title, select the respective layer from the Map Structure (#2). Legend data text can be defined by either manually entering the text under the break settings on the layer screen, or by using the Break Legend Text Template tool under Metrics. Legends can also be turned off within each layer settings screen.

Sample legend display
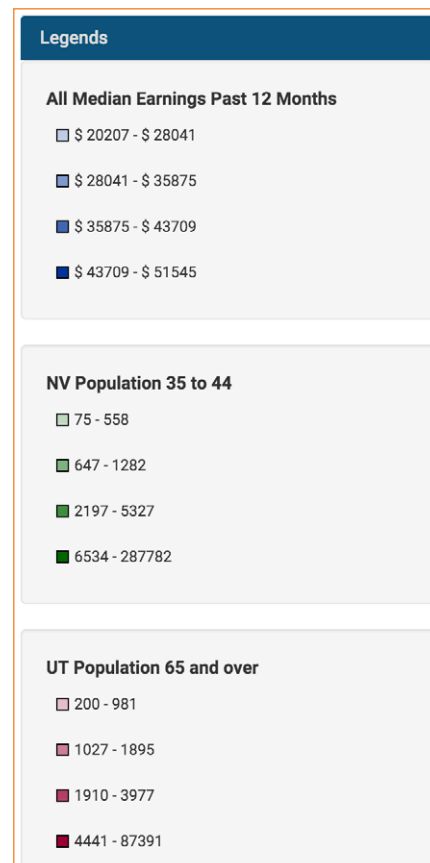
Changing the Appearance of your Map

Using your data, the FactLook wizard automatically generates a map using default settings to display certain key visual elements. (see Table 3.1: Layer Defaults & Options on page 18 for a list of defaults and available options.)

If you would like to customize those options, click on any layer in the Map Structure. The options governing the display of your map and data values are bundled under three sections: General, Property Style Sets and Breaks.

a. General

1. Name: Change the name of the layer here.

2. Marker Type: Choose the type of marker to be used for Specifc Address layers.

3. Filter: If you have filtered any datasets to create additional layers (see page 13 of this manual), the parameters of the filter will be displayed here.

4. Enable Legends: This is ON by default. Deselect to hide the legends associated with a layer used in this map. A quick way to address legends and markers that contain mulitple metrics.

b. Metrics

1. Metric Source: The "metric source" is the identifier telling the FactLook wizard which data to use to create breaks or plot specific locations. If a layer is set to display multiple metrics/property sets, they will be displayed here as tabs.

2. Number of Breaks: The FactLook wizard automatically groups your data into subsets called breaks. The default setting is four breaks. You may change this setting to any number. Also, see "Break By" description in item #6.

Min/Max values for the number of data breaks can be adjusted manually

Enabled	Property	Break 1	Break 2	Break 3	Break 4
	Legend text	$ 0 - $ 15104	$ 15104 - $ 30...	$ 30208 - $ 45...	$ 45312 - $ 60...
	Decimal points	0	0	0	0
	Minimim Value	0	15001	30001	45001
	Maximum Value	15000	30000	45000	60417
	Include Minimum Value	✔	✔	✔	✔
	Include Maximum Value	✖	✖	✖	✔
✔	Fill Color	#BFCCE5	#7F99CC	#3F66B2	#003399
✔	Fill Opacity	75%	75%	75%	75%
✔	Border Width	1	1	1	1
✔	Border Color	black	black	black	black
✔	Border Opacity	100%	100%	100%	100%
✔	Show Border	✔	✔	✔	✔

3. Break Legend Text Template: This tool can be used to change all the legend text across the breaks. By default, the legend text uses the minimum and maximum values for each break. For example: if you wanted to add "$" before the minimum and maximum values in the legend, simply enter "$" in the break format field before the "{min}" and "{max}" text to see the change reflected below in the Breaks section for the Legend Text.

4. Color Scheme: Color is used to provide visual information about the data on display. The FactLook wizard pairs data breaks with shades of color, and these are then displayed in the legend. There are three standard color schemes: Green, Red and Blue. These colors may be changed to non-standard colors in the Fill Color setting in the Breaks section.

5. Show Metric Legend: ON by default, deselect to hide the legend associated with this specific layer. You may also provide a Legend Title in the space provided.

Legend settings

|	
Color Scheme	Blue
Show Metric Legend	☑ All Median Earnings Past 12 Months

6. Break By: By default, this is set to "Equal Size Data Ranges", which sets equal gaps between the data breaks. This can be changed to "Equal Size Groups", which assigns the data into equal sized groups on the map, which typically produces a more visually balanced-looking map (see example below).

FactLook has two break calculation methods for distributing the raw data. "Equal Size Data Ranges" distributes the raw data across the number of breaks with an equal range between (ex: the 35 to 44 years old population data values for the map range from 74 to 287,782 per county, so 287,782 - 74 = 287,708 ÷ 4 breaks = 71,927 range for each break).

As most county population numbers in Nevada fall into the first break using this method, this creates a more visually flat map (mostly light green, only one darker shape representng Clark County).

"Equal Size Groups" takes the raw data and distributes into equal sized groups for the map (ex: 17 datapoints for 17 counties in Nevada ÷ 4 breaks = 4.25 counties for each shade of green). The first three breaks are assigned 4 counties and the last break 5 counties.

Equal Size Data Ranges vs Equal Size Groups for data breaks
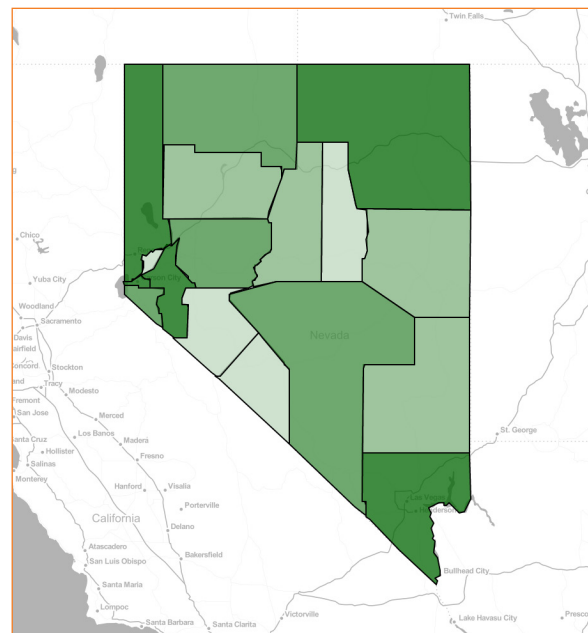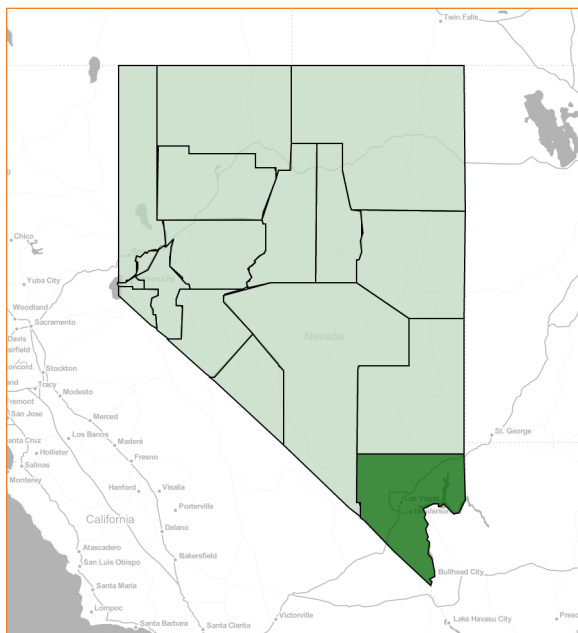
Changing the Appearance of your Map (continued)

c. Breaks

The Breaks panel contains a variety of controls to further refine how data values are visually presented on the map.

1. Legend Text: The FactLook wizard will present the numerical data ranges associated with each break in the map legend. You may change those ranges to any combination of letters or numbers. Use the Break Legend Text Template tool to quickly standardize formatting across all the legend text.

2. Decimal Points: If the data you pasted into the FactLook wizard for this layer included decimal points, you can change the settings in this row to display them in the Legend. To do so, enter the number of digits to be displayed to the right of the decimal point. "1" will show one number, "2" will display two numbers and so on.

3. Number of Datapoints: When break by has been set to Equal Size Groups, the FactLook wizard displays the number of datapoints assigned to each break. These value cannot be adjusted.

4. Minimum Value / Maximum Value: When "Break By" has been set to Equal Size Data Ranges, the FactLook wizard automatically determines the size of each break. It then scans each break to determine the lowest numerical value as well as the highest numerical value. Using the Include Minimum Value and Maximum Value controls, you can decide where the minimum and maximum values fall within the breaks (by default the overall maximim value in the data range must fall in the last break).

5. Fill Color: When using any of the FactLook standard Color Schemes (Green, Red or Blue), the FactLook wizard will assign a number of shades (depending on the number of data breaks) of the selected color to each of the breaks. You may change these colors by clicking on the cell. A pop-up window will display from which you may choose from a color swatch palette or by entering a new hexadecimal color code.

Fill color and opacity settings

Enabled	Property	Break 1	Break 2	Break 3	Break 4
	Legend text	$ 0 - $ 28134	$ 28281 - $ 32…	$ 33077 - $ 37…	$ 37600 - $ 60…
	Decimal points	0	0	0	0
	Number of Datapoints	64	64	64	62
✔	Fill Color	#BFD8BF	#7FB27F	#3F8C3F	#006600
✔	Fill Opacity	75%	75%	75%	75%
✔	Border Width	1	1	1	1
✔	Border Color	black	black	black	black
✔	Border Opacity	100%	100%	100%	100%
✔	Show Border	✔	✔	✔	✔

6. Fill Opacity: Lowering the Fill Opacity setting will result in more of the map's base layer being visible. A higher Fill Opacity setting will increase the amount of color displayed in the geographic unit.

7. Border Width: the Border Width for each break may be set separately. The higher the number used in the Border Width setting, the thicker the border.

8. Border Color: Just as with Fill Color, the border color is controlled via a pop-up window that offers a color palette picker. The default Border Color is black.

9. Border Opacity: The default 100% Border Opacity presents as a solid border. Lower the value to make the border less visible.

10. Show Border: Deselect this option to hide the border associated with one or more breaks.

11. Radius (location-based layers only): Set the size of the marker used for representing GeoCoded addresses. Larger the number, the larger size of the marker.

12. Number of sides (location-based layers only): Choose the number of sides for markers, to determine what shape it is. 60 = circle, as default.

13. Bar Width (location-based layers only): Set the size of individual bars within the marker charts.

14. Chart Max Height (location-based layers only): Set the overall size of the marker charts.

Table 3.1: Default layer settings and user defined options

SETTING	DEFAULT	OTHER OPTIONS
METRICS		
COLOR SCHEME	Blue	Green, Red
SHOW METRIC LEGEND	On	Off
NUMBER OF BREAKS	4	User Defined
BREAK LEGEND TEXT TEMPLATE	{minimum} - {maximum}	User Defined
BREAK BY	Equal Size Data Ranges	Equal Size Groups
SETTING	DEFAULT	OTHER OPTIONS
BREAKS		
DECIMAL POINTS	0	User Defined
FILL COLOR	Blue (Red or Green) Shades	User Defined
FILL OPACITY	75%	0 - 100%
BORDER WIDTH	1	1 - 100
BORDER COLOR	Black	User Defined
BORDER OPACITY	100%	0 - 100%
SHOW BORDER	On	Off
RADIUS	10	1 - 100
NUMBER OF SIDES	60 (circle)	3 - 60
BAR WIDTH	10	10 - 100
CHART MAX HEIGHT	10	10 - 100

Advanced Features: Geocoding and Custom Areas

a. Intro to Geocoding

FactLook allows you to "pin" specific locations using street addresses or latitude/longitude coordinates to your map. This feature, called Geocoding, can be used to identify your organization's retail store or business office locations, state capitals or courthouses, airports, transportation hubs or myriad other address-specific data. FactLook's Geocoding feature is simple to use but does require the user to pre-format your data before pasting it into the FactLook wizard.

Location / Street Address

1. Format your spreadsheet:

When Geocoding with FactLook, your spreadsheet must be formatted to include the following columns of data for each location to be plotted on the map.

• A unique Key Field ID (this is assigned to each marker when placed on the map)

• Street Address (for location)

• City (for location)

• State (for location)

• ZIP code (for location)

• Initial metric value (numeric value assigned to each marker, required for determining data break calculation)

Be sure to create a header row using the above labels for each of the columns.

Sample spreadsheet showing column headers

Here's an example of a spreadsheet that's been formatted for FactLook Geocoding:

2. Copy the addresses and header row

After formatting your data, you'll need to select the addresses you wish to pin to your map as well as the header row (the row on your spreadsheet with Key, Street, City, etc.)

Copy all cells of data from spreadsheet

3. Create Map or Add Dataset to Existing Map

If you have not yet created the map to which you wish to pin the addresses you copied in step 2, do so now.

a. From the Dashboard: Select "+ Create a New Map".

b. Give your map a name: Enter a name for your map in the appropriate field and provide a brief description if desired. Click Next.

c. Select geography type: Choose Location / Street Address. Click Next.

Geography type for geocoding

d. Selected Location / Street Address geographies: Place cursor in the cell beneath the "A" column header.

Select cell below "A" header in data grid

e. Paste data: Paste data into the FactLook Wizard. The header row will automatically update with the header row and data from your spreadsheet. Click Next.

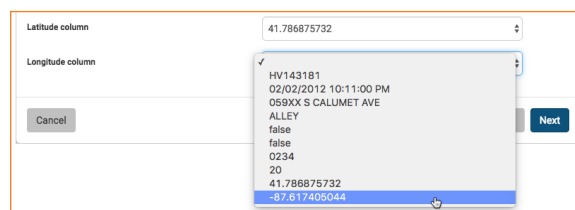Paste data, including column headers

f. Select columns to use for required values: Help the FactLook Wizard identify which columns of data to use in order to place your pins. Click Next to view your map.
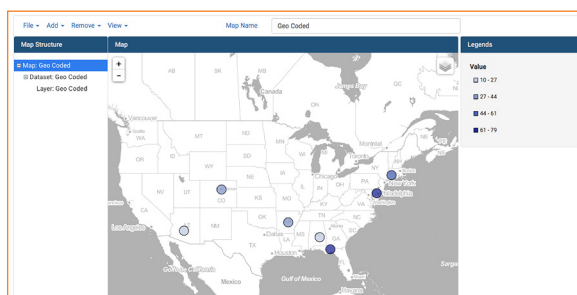
Required values to set up geocoding

Location / Latitude, Longitude

1. You can also create a map using the latitude and longitude coordinates of one or several locations. To do so you will need valid coordinates for each location you wish to pin on the map. Here is a sample of a spreadsheet which has been formatted correctly:

Sample spreadsheet formatted correctly

2. Copy the locations and header rows:

After formatting your spreadsheet, select the rows of cells cells containing the locations — including the header row — you want to display on your map, as in the example below.

Copy all cells (including headers)

3. Create map or add dataset to existing map

If you have not yet created a map, or having created a map you wish to add these locations as a unique dataset, do so now

By creating a new map:

a. From the Dashboard: Select "+ Create a New Map".

b. Give your map a name: Enter a name for your map in the appropriate field and provide a brief description if desired. Click Next.

c. Select geography type: Location / Latitude, Longitude Map.

d. Click Next.

Select geography type
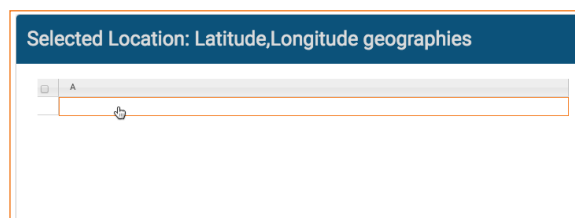
By adding a new dataset:

a. From the Map view, select Add > New Dataset

b. Give your dataset a name and provide a brief description if desired. Click Next.

c. Select geography type: Location / Latitude, Longitude Map.

d. Click Next.

e. Paste data: Paste data into the FactLook Wizard. The header row will automatically update with the header row and data from your spreadsheet.

f. Click Next.

Paste raw data into FactLook data grid

g. Select columns to use for required values: Help the FactLook Wizard identify which columns of data to use in order to place your pins.

h. Click Next to view your map.

Set required values

4. Changing the look of your geocoded markers

By default, FactLook presents your geocoded markers as circles in shades of blue. You may change the color, shape and size of the markers via options in the Layer settings.

Default settings for geocoded markers

a. Within the Map Structure, click the Layer settings of the layer you wish to configure.

b. Change the default color using the color picker or by entering hexadecimal values.

Changing default fill color settings

c. Change the default marker shape from a circle by changing the value of the Number of Sides. (60 = circle, 3 = triangle, etc.)

Changing marker geometric shape

Breaks					
Enabled	Property	Break 1	Break 2	Break 3	Break 4
	Legend text				
	Minimim Value	10	27	44	61
	Maximum Value	27	44	61	79
	Include Minimum Value	✔	✔	✔	✔
	Include Maximum Value	✖	✖	✖	✔
✔	Fill Color	#ffff00	#980000	#9900ff	#e69138
✔	Fill Opacity	75%	75%	75%	75%
✔	Border Width	1	1	1	1
✔	Border Color	black	black	black	black
✔	Border Opacity	100%	100%	100%	100%
✔	Show Border	✔	✔	✔	✔
✔	Radius	10	10	10	10
✔	Number of Sides	3	4	5	60

d. Change the size of the markers by changing the value of the Radius (the larger the radius, the larger the marker that will appear on the map).

Changing marker size, relative to other markers

| Breaks					
Enabled	Property	Break 1	Break 2	Break 3	Break 4
	Legend text				
	Minimim Value	10	27	44	61
	Maximum Value	27	44	61	79
	Include Minimum Value	✔	✔	✔	✔
	Include Maximum Value	✖	✖	✖	✔
✔	Fill Color	#ffff00	#980000	#9900ff	#e69138
✔	Fill Opacity	75%	75%	75%	75%
✔	Border Width	1	1	1	1
✔	Border Color	black	black	black	black
✔	Border Opacity	100%	100%	100%	100%
✔	Show Border	✔	✔	✔	✔
✔	Radius	10	20	30	40
✔	Number of Sides	3	4	5	60

e. View changes by selecting Map: {Map Name} from the map structure

Marker changes updated on map view
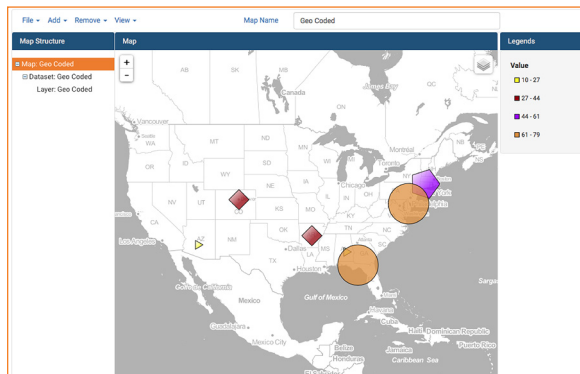
f. Hovering the cursor over any of the markers will display the key field identifier chosen on the required values screen. Click on any of the markers to view values and other details associated with each of the geocoded locations.

Marker changes updated on map view
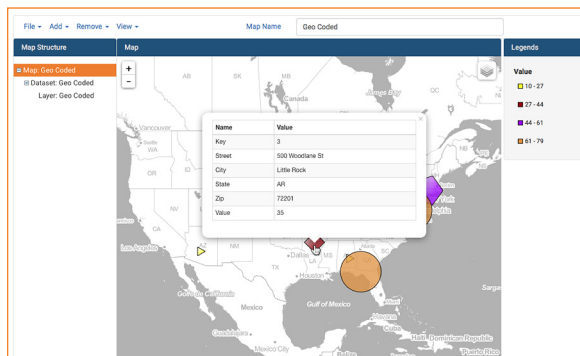
b. Working with Multiple Metrics

FactLook gives you the capability to assign multiple metric values to a single geocoded location which are then displayed on a map as fully-customizable bar charts.

Location / Street Address

1. Format your spreadsheet:

Format your spreadsheet in the same manner as when using FactLook's geocoding feature. In addition to the required columns of data, you'll want to include columns of the additional metric values to be associated with each marker.

• **A unique Key Field ID** (this is assigned to each marker when placed on the map)

• **Street Address** (for location)

• **City** (for location)

• **State** (for location)

• **ZIP code** (for location)

• **Initial metric value** (numeric value assigned to each marker, required for determining data break calculation)

• **Additional metric value(s)** (the additional data you wish to associate with each marker)

Be sure to create a header row using the above labels for each of the columns.

Here's an example of a spreadsheet that's been formatted for a geocoded location with multiple metrics (three).

Sample spreadsheet showing three metric columns

KEY	Street	City	State	Zip	Grocery	Automotive	Rx
		Sales by Department					
Store 1	600 Dexter Avenue	Montgomery	AL	36130	23124	32125	88323
Store 2	1700 West Washington Street	Phoenix	AZ	85007	11981	12393	27392
Store 3	500 Woodlane St	Little Rock	AR	72201	35426	82121	50324
Store 4	200 E Colfax Ave	Denver	CO	80203	43100	43920	12039
Store 5	210 Capitol Avenue	Hartford	CT	061016	52320	22390	40390
Store 6	150 Martin Luther King Jr. Blvd. South	Dover	DE	19901	68009	51240	67223
Store 7	400 S. Monroe St.	Tallahassee	FL	32399	79023	63888	77291

2. Copy the addresses and header row

After formatting your data, you'll need to select the addresses and data you want to pin to your map, Be sure to copy the header row (the row on your spreadsheet with Key, Street, City, etc.)

Copy all cells of data from spreadsheet

3. Create Map or Add Dataset to Existing Map

If you have not yet created the map to which you wish to pin the addresses you copied in step 2, do so now.

a. From the Dashboard: Select "+ Create a New Map".

b. Give your map a name: Enter a name for your map in the appropriate field and provide a brief description if desired. Click Next.

c. Select geography type: Choose Location / Street Address. Click Next.

Geography type for geocoding

d. Selected Location / Street Address geographies: Place cursor in the cell beneath the "A" column header.

Select cell below "A" header in data grid

e. Paste data: Paste data into the FactLook Wizard. The header row will automatically update with the header row and data from your spreadsheet. Click Next.

Paste data, including column headers

f. Select columns to use for required values (see image at top of next column): Help the FactLook Wizard identify which columns of data to use in order to place your pins. Choose one of the metrics you'd like to display (you will add the additional metrics in later steps). Click Next to view your map.

Required values to set up geocoding
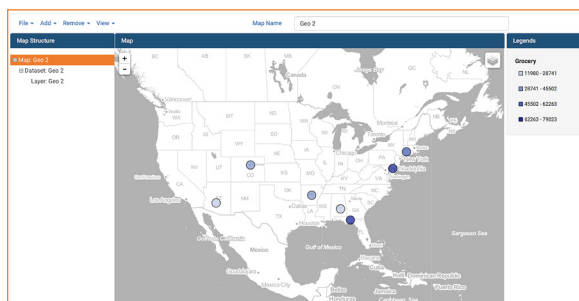

4. Adding Additional Metrics

Default settings for single metric markers

a. After clicking Next in the previous step, your map will display a single metric. To add additional metrics, from the Layer view, select "Add" > "Metric Configuration".

Adding another metric to marker

b. A new window will open. From the drop down menu, select the additional metric value you wish to add to the marker. Only values that have not previously been added to the marker will be displayed.

Selecting data source for new metric

c. A new tab will appear in the Metrics panel in the Layer view. Adjust colors and other styles for this metric using the selectors in the Breaks panel.

Additional tab for new metric is added

d. Add additional metrics using the same procedure as above. Assign a unique color palette to each metric set, to be displayed in the bar chart (see image at top of next column).
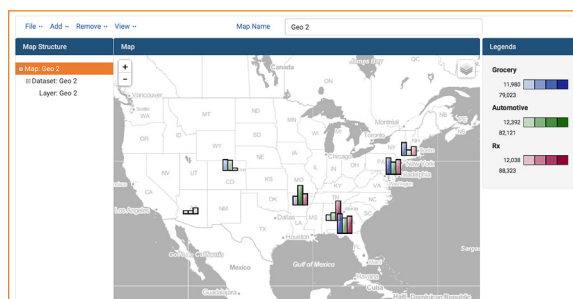
Setting unique colors for each metric

e. In the General panel, change the Marker Type from "Shape" to "Barchart".

Marker type drop-down setting

f. In the Breaks panel, set the bar widths for each break and the overall chart maximum height to suit your preferences.

Chart width and height settings

g. Go to Map view to see your changes.

Multiple metric bar charts now displayed

h. Hovering the cursor over any of the bars in the chart will display the key field identifier chosen on the required values screen. Click on bar charts to view all metrics associated with that marker.

Multiple metric bar charts now displayed

Location / Latitude, Longitude

The instructions for displaying multiple metrics to geocoded latitude/longitude locations is the same as described above. The only exception is in the formatting of the spreadsheet. The columns for "Street Address", "City", "State" and "ZIP" are understandably not required. Instead, use two columns, Latitude and Longitude.

c. Building Custom Areas

In addition to using the Wizard to selectively choose which geographies to include in a particular layer, another way to build a custom area on your map is to simply paste in raw data to define the area. As long as each shape has a GeoID associated with it, FactLook will recognize the ID and include it in the area.

This can be especially useful when defining complex custom areas that cross state, county or other geographical borders. For example: ZIP codes do not typically adhere to state or county borders. Creating a custom area for 100 ZIP codes within a three state region would require manually selecting individual ZIP codes within the states using the Wizard.

By pasting in the raw data as a set and then telling FactLook what the GeoID for each shape is, the system will build the custom area for you. As a result, you can also specify a metric for each shape within the custom area while creating the layer.

Custom shape based on ZIP codes
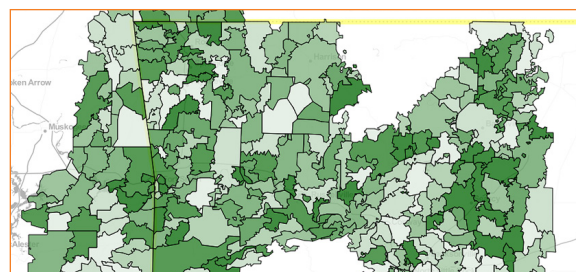
Saving, Printing and Exporting Maps

a. Saving Maps

1. When working on a map: every time you select a dataset or layer in the Map Structure (whether to make changes to a layer or view data), clicking back on the map layer to view the map automatically saves your changes.

2. When viewing the map and not clicking anything in the Map Structure: any panning, zooming or turning on/off of layers will not be saved unless you click "Save" under the file dropdown. These changes will then be saved to the map file in your dashboard.

b. Printing Maps

1. When you are ready to save a map image (either for printing or inserting into another document, such as Word or PPT), set the layers on/off and adjust the zoom and panning to the desired look. Then click "Save Image" under the file dropdown UI, and a PNG file will be saved to your device.

Saving map and image for export
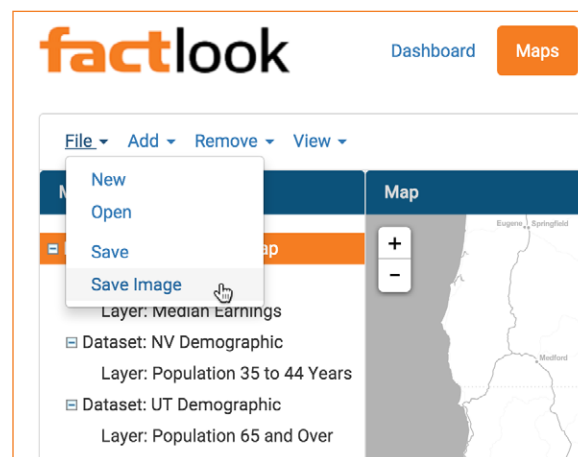
Account Settings

You may change your password and view your remaining datapoint credit balance at any time by selecting "Settings" from the top navigation.

Changing your password

Follow the instructions to change your password.

View Remaining Datapoint Credits

The FactLook wizard maintains a running total of the datapoint credit balance associated with your account. At the end of the 30-day billing period, a new allotment of datapoint credits associated with your plan will be added to any unused credits from the previous month(s). The FactLook wizard will notify you if a you exceed your available balance and will provide instructions for purchasing more datapoint credits, if desired.

Support

FactLook customer support is available for questions about billing, problems accessing your account and technical issues.

For help using the software, check the tutorials page on the blog.factlook.com website — you'll find videos that address the most common user questions. In addition, an online version of this user manual is also available at blog.factlook.com. FAQs, a Knowledge Base and Known Issues can also be found there for review.

To contact FactLook support, email support@factlook.com. A FactLook customer support specialist will respond to your issue within 48 hours of receiving your email.

Glossary

The following are key terms you will encounter when using FactLook. You're encouraged to familiarize yourself with them.

Break:

A break is a group of data within a value range that you can set manually or allow the FactLook wizard to set for you. An example of a set of breaks is:

1 - 99

99 - 150

150 - 400

These groups or "breaks" are visibly displayed on your map via color or other identifier, and can be adjusted using the options in the layer's Property Style Settings. The FactLook wizard allows you to set as many breaks as you want.

Datapoint:

A datapoint is a term used to describe a single visible element on a map. That element could be a county, state, ZIP code, census tract or even a specific street address (GeoCoding). Your monthly FactLook plan comes with a set number of datapoint credits; if you exceed that number during the course of the month, your account will be automatically charged for the overage, currently set at 0.1¢ per additional datapoint.

Datapoint Credit:

Each FactLook plan comes with a set number of datapoint credits. The FactLook wizard will use these credits to build your maps. A single credit is equal to a single visible feature on your map. The easiest way to determine how many datapoint credits it will take to build you map is to count the number of rows of data that you will be copying from your spreadsheet and pasting into the FactLook wizard.

Glossary (continued)

Dataset:

A collection of datapoints is a dataset. The FactLook wizard groups datapoints into sets so that you can easily apply styles, breaks and other identifiers that help visually represent your data.

Data Source:

Your raw data to be used in FactLook to create a thematic map. Typically contained and formatted in a spreadsheet program, such as Microsoft Excel or Apple Numbers.

Equal Size Data Range / Equal Size Groups:

These are the two methods for creating breaks employed by the FactLook wizard.

Equal Size Data Ranges distributes the raw data across the number of breaks with an equal range between (ex: population data values for the map range from 713 to 6,318,306 per county, so 6,318,306 - 713 = 6,317,593 ÷ 4 breaks = 1,579,398 range for each break).

Equal Size Groups takes the raw data and distributes into equal sized groups for the map (ex: 58 datapoints for 58 counties in CA ÷ 4 breaks = 14.5 counties for each shade of blue). The first three breaks are assigned 14 counties and the last break 16 counties.

Fill Opacity:

Each shape displayed on a map has the transparency set through the use of the fill opacity control. Set this value from 0 to 100%, to determine how much of the underlying layers are visible.

Geocoding:

The process of transforming a description of a location (such as an address, name of a place, or coordinates) to a location on the earth's surface. Geocoding typically refers to the transformation process of addresses and places to coordinates.

Hex Values for Color Picker:

When using the color picker to set your colors for fill and border, the hexadecimal color system may be used for exact color matching. If you are not familiar with the hex system, then simply choosing one of the preset swatches should be sufficient.

Map Structure:

The FactLook Map Structure defines how your map is presented. Your raw data is used to create datasets, which can contain any number of layers. Layers are then styled using the settings screen, which creates the look of your map.

Metric:

A metric can be attached to each shape or marker displayed on the map. Metrics come from your raw data source and are defined when setting up the dataset and layer using the wizard.

Thematic Map:

A customized map built on the concept of associating raw data with either geographic shapes or GeoCoded markers for specific addresses.