

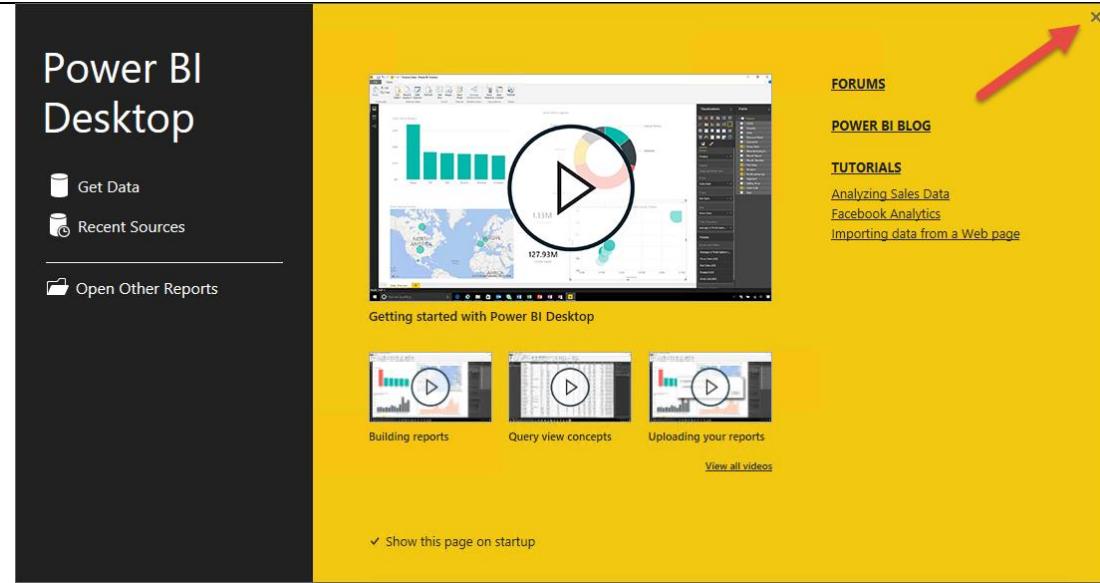
# Alteryx Demo / Lab Instructions

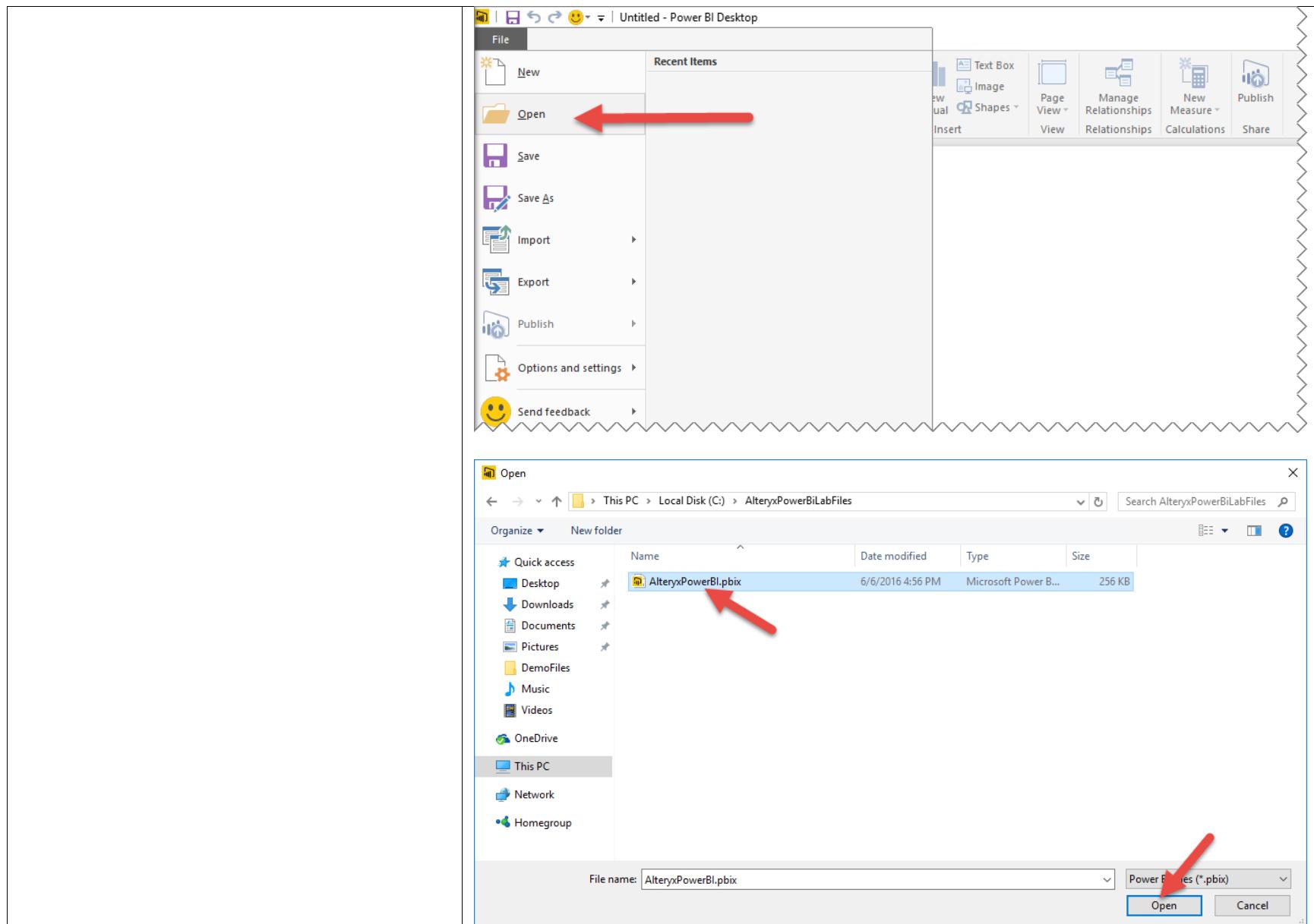
## Prerequisites

- You must be connected to the internet
- You must be running a Windows 7 computer or later
- You must have Internet Explorer 9 or greater.
- You must download and install Power BI Desktop (<https://aka.ms/pbidesktopdl>)
- You must download the lab files from <http://aka.ms/alteryxpbilabfiles>
  - Extract the .zip file to a folder off your C: Drive. "**C:\AlteryxPowerBILabFiles**" is the recommended path. Regardless, make sure to remember where you extracted them.
  - The .zip file contains the instructions and data files needed for this lab:
    - "**Alteryx Session Lab Steps.pdf**" is a PDF file with a copy of these instructions
    - "**AlteryxPowerBi.pbix**" is a pre-created Power BI dataset and report.
    - "**AlteryxPowerBI.csv**" is the source data you will create a new report from
- You need an active Power BI account. You can either:
  - Sign up for Power BI with an existing corporate credential (not a gmail.com or outlook.com type of account). You can sign up here: <https://aka.ms/pbisignup>
  - Use a pre-supplied account given to you at the event. See your event proctors for login credentials.

## Reviewing an Existing Power BI Report

1. Open Power BI Desktop on your computer
2. If the "Startup" window appears, click the "x" in the top right corner to close it.
3. From the Power BI Desktop menu bar, select "**File**" | "**Open**"
4. Navigate to the folder where you extracted the AlteryxPowerBiLabFiles.zip, and open the **AlteryxPowerBi.pbix** file.





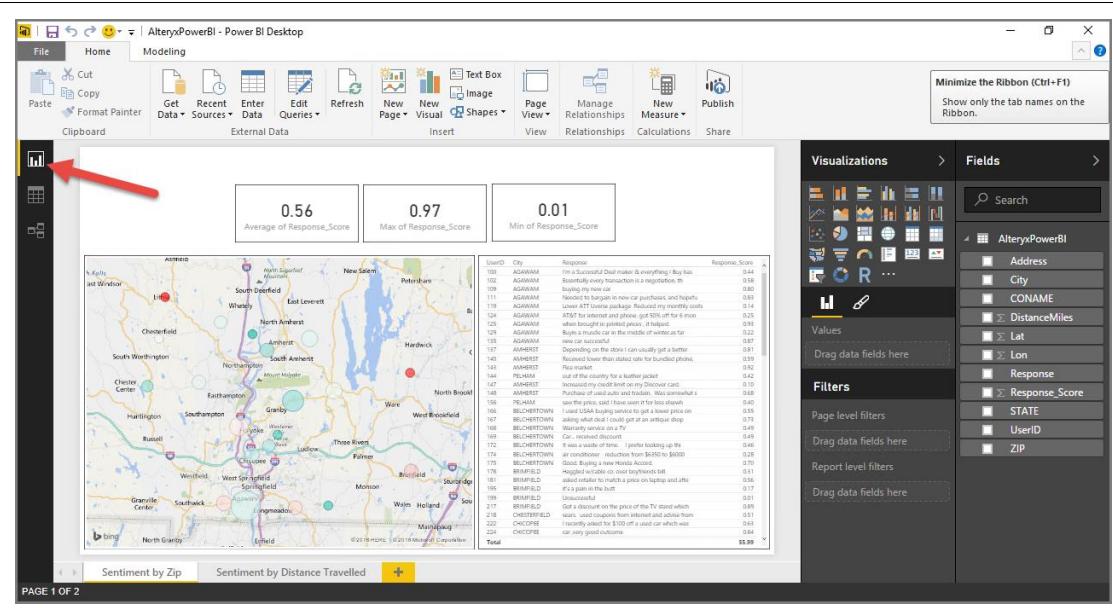
5. Click the “Data” icon along the left edge to open up the Dataset used for the sample report.
6. *The data we are working with is similar to the data you saw us preparing in the earlier demo. The following describes this data:*
  - o Has customer sentiments – customer responses to a survey
  - o Data is geocoded
  - o Customer sentiments are about 3 companies
  - o Data has distance from customer to company

AlteryxPowerBI - Power BI Desktop

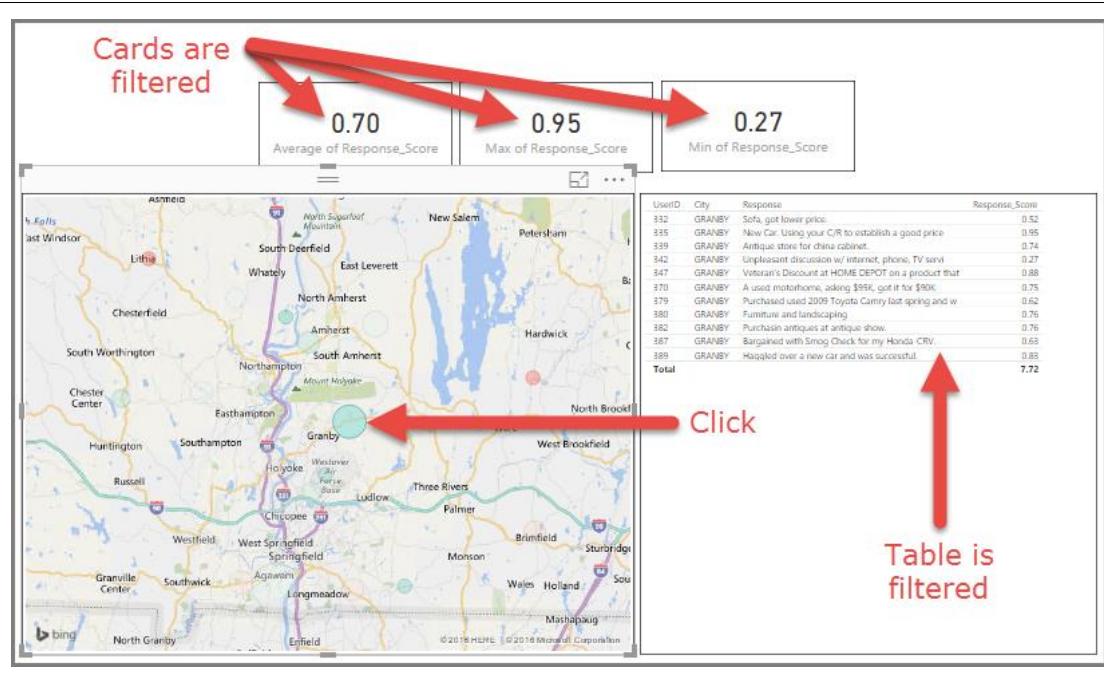
The screenshot shows the AlteryxPowerBI - Power BI Desktop interface. The ribbon menu at the top includes File, Home, Modeling, Paste, Cut, Copy, Format Painter, Get Data, Recent Sources, Enter Data, Edit Queries, Refresh, New Page, New Visual, Insert, Page View, Manage Relationships, New Measure, Calculations, and Publish. Below the ribbon is a grid view of a dataset with columns: UserID, Response, Response\_Score, Address, City, State, and ZIP. The 'Fields' pane on the right lists the columns: UserID, Response, Response\_Score, Address, City, State, ZIP, Lat, Lon, CONAME, and DistanceMiles. A red arrow points to the 'Data' icon in the ribbon.

UserID	Response	Response_Score	Address	City	State	ZIP
101	I'm a Successful Deal maker & everything I Buy has essentially every transaction is a negotiation, th	0.4376479	9 ALFRED CT	AGAWAM	MA	01001
102	buying my new car	0.579868	90 INDUSTRIAL LN #1	AGAWAM	MA	01001
109	Needed to bargain in new car purchases, and hopefully	0.798341	943 RIVER RD	AGAWAM	MA	01001
111	Lower ATT Uverse package. Reduced my monthly costs	0.8256946	80 INDUSTRIAL LN	AGAWAM	MA	01001
119	AT&T for internet and phone. got 50% off for 6 mon	0.14216363	PO BOX 628	AGAWAM	MA	01001
124	when brought in printed prices , it helped.	0.2466	1325 SPRINGFIELD ST	AGAWAM	MA	01001
125	Buyin a muscle car in the middle of winter.as far	0.9263571	312 SPRINGFIELD ST	AGAWAM	MA	01001
129	new car successful	0.219412	57 ALMGREN DR	AGAWAM	MA	01001
135	Depending on the store I can usually get a better	0.8653712	100 BOWLES RD	AGAWAM	MA	01001
137	Received lower than stated rate for bundled phone,	0.810994	730 WEST ST	AMHERST	MA	01002
140	Flea market	0.585153	191 POMEROY LN	AMHERST	MA	01002
143	out of the country for a leather jacket	0.9179552	ROUTE 9	AMHERST	MA	01002
144	Increased my credit limit on my Discover card.	0.422473	355 AMHERST RD	PELHAM	MA	01002
147	Purchase of used auto and tradein. Was somewhat s	0.09767311	28 HENRY ST	AMHERST	MA	01002
148	saw the price, said I have seen it for less elsewhere	0.6844173	485 WEST ST	AMHERST	MA	01002
156	I used USA buying service to get a lower price on	0.3964761	38 AMHERST RD # D	PELHAM	MA	01002
166	asking what deal I could get at an antique shop	0.5547729	6 BERKSHIRE AVE	BELCHERTOW	MA	01007
167	Warranty service on a TV	0.7325888	8 BERKSHIRE AVE	BELCHERTOW	MA	01007
168	Car... received discount.	0.485614	7 BERKSHIRE AVE	BELCHERTOW	MA	01007
169	It was a waste of time. I prefer looking up thi	0.4909821	40 WARE RD	BELCHERTOW	MA	01007
172		0.4581678	111 SARGENT ST	BELCHERTOW	MA	01007

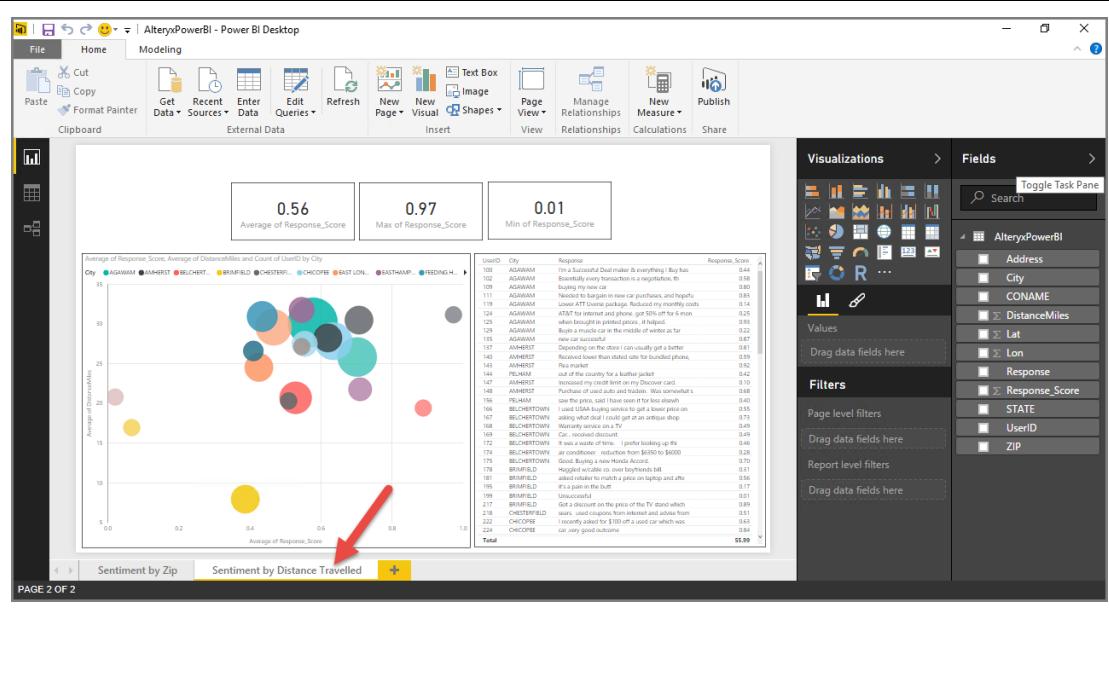
7. Click the “**Report**” icon along the left to view the sample report.
  8. *This report is taking advantage of out-of-the-box controls:*
    - *Map*
    - *Table*
    - *Cards*
  9. *The Map control takes advantage of the fact that we geocoded the sentiment data.*
    - *The size of the bubbles represents the relative count of customers*
    - *The color of the bubbles represents the relative sentiment*
  10. *The Table show the raw responses*
  11. *The Cards above show specific indicators such as the average response score.*



12. Click on any of the bubbles in the map.
13. Notice that the list and the cards are filtered to your selection.
14. As we will see later, we can easily control which controls are filtered and when.

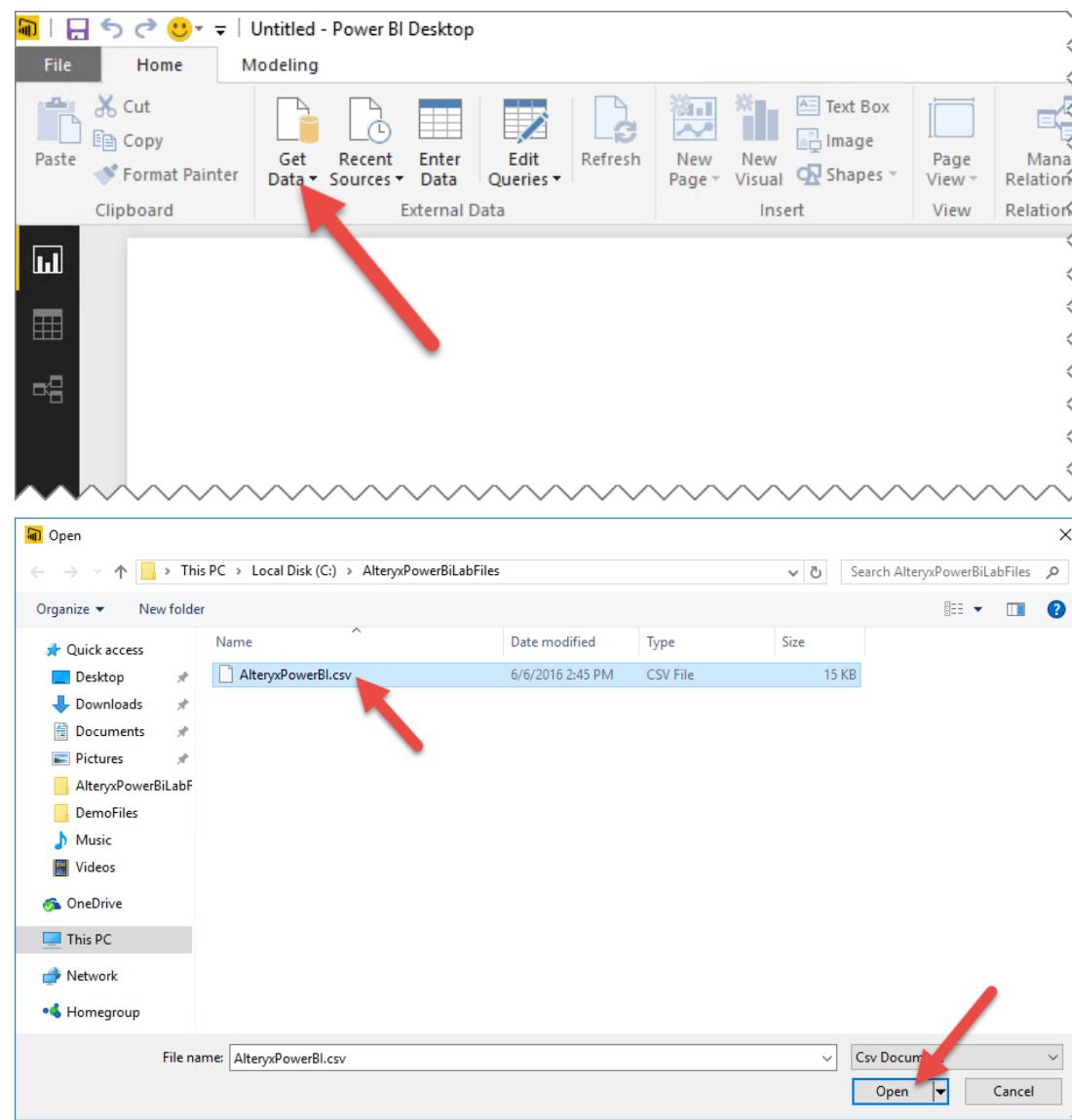


15. Reports can have multiple pages
16. Click on the 'Sentiment by Distance Traveled' tab on the bottom to navigate to the second page of this report.
17. This page also has a Table control along with some cards. However, instead of a Map, the page has a Scatter Chart.
18. The Scatter Chart is allowing us to visualize the average of response score by the average of the distance in miles. The thought was that the sentiment may be negatively related to proximity to the company location. However, this visualization does not support that.
19. Click on any of the bubbles in the Scatter Chart. Notice that the cards and the list are being filtered here, as well.
20. Close Power BI. We will open a new instance for the next part of the lab.



## Creating the Report Yourself

21. Now that you have seen some of the rich visualizations that are available to you in these reports, let's create the report yourself.
22. **Open Power BI to start a new report.** If the startup window appears, as before, click the "X" in the top right corner to close it.
23. From the "**Home**" ribbon, **Click the "Get Data" button**
24. You have a variety of data sources that you can choose from for your source data, including:
  - o Azure SQL Database
  - o Azure SQL Data Warehouse
  - o Spark
  - o Variety of file-based data sources
25. Further, as you saw in the earlier demo, Alteryx is able to publish directly to PowerBI. We are going to use data from an Alteryx workflow demoed previously.
26. In the "Get Data" window, **Click "CSV" and then Click "Connect".**
27. In the "Open" window, navigate to the folder where you extracted the "AlteryxPowerBiLabFiles.zip" file, **Click the "AlteryxPowerBi.csv" file and Click "Open".**



28. In the "AlteryxPowerBI.csv" preview window, **Click "Edit"**.
29. In the "Query Editor" window, **Scroll Horizontally** to view the "Zip" column, then **Click the "Zip" Column Header** to select the column
30. *When the "Zip" column was read it, it was converted to a number and the leading zero was stripped off. We need to change its data type to text, and re-add the leading "zero" for them to be proper Zip codes.*

**AlteryxPowerBI.csv**

UserID	Response	Response_Score	Address	City	STATE
100	I'm a Successful Deal maker & everything I Buy has	0.4376479	9 ALFRED CT	AGAWAM	MA
102	Essentially every transaction is a negotiation, th	0.579868	90 INDUSTRIAL LN # 1	AGAWAM	MA
109	buying my new car	0.798341	943 RIVER RD	AGAWAM	MA
111	Needed to bargain in new car purchases, and hopefu	0.8256946	80 INDUSTRIAL LN	AGAWAM	MA
119	Lower ATT Uverse package. Reduced my monthly costs	0.1416363	PO BOX 628	AGAWAM	MA
124	AT&T for internet and phone. got 50% off for 6 mon	0.2466	1325 SPRINGFIELD ST	AGAWAM	MA
125	when brought in printed prices , it helped.	0.9263571	312 SPRINGFIELD ST	AGAWAM	MA
126	Power BI is great for business intelligence	0.2104113	57 ALMGREN DR	AGAWAM	MA

**Load** **Edit** **Cancel**

**Untitled - Query Editor**

**AlteryxPowerBI**

**Properties**  
Name: AlteryxPowerBI  
All Properties

**Applied Steps**  
Source  
Promoted Headers  
Changed Type

**Query Settings**

**Table**

**Queries [1]**

**AlteryxPowerBI**

**11 COLUMNS, 100 ROWS**

**PREVIEW DOWNLOADED AT 6:21 PM**

31. With the "Zip" column selected, **Click the "Transform" ribbon**, **Click "Data Type: Whole Number"** then **Click "Text"** to change the data type to text.

The screenshot shows the Alteryx Query Editor interface. The 'Transform' ribbon tab is selected. A red arrow points from the 'Transform' tab to the 'Data Type' dropdown menu. The 'Data Type' menu is open, showing options like Whole Number, Date/Time, Text, and True/False. The 'Text' option is highlighted with a red arrow. The main workspace displays a table with columns: City, State, Zip, Lat, and Lon. The Zip column contains numerical values like 1001, 42.05389052, etc.

32. Next we need to resupply the leading zero that was stripped off of the Zip codes.

The screenshot shows the Alteryx Query Editor interface. The 'Transform' ribbon tab is selected. A red arrow points from the 'Transform' tab to the 'Format' dropdown menu. The 'Format' menu is open, showing options like lowercase, uppercase, and add prefix/suffix. The 'Add Prefix' option is highlighted with a red arrow. The main workspace displays a table with columns: City, State, Zip, Lat, and Lon. The Zip column values are now prepended with a leading zero, such as '01001'.

33. With the "Zip" column still selected, **Click** the "Transform" ribbon, then **Click** the "Format" button, and then **Click** "Add Prefix".

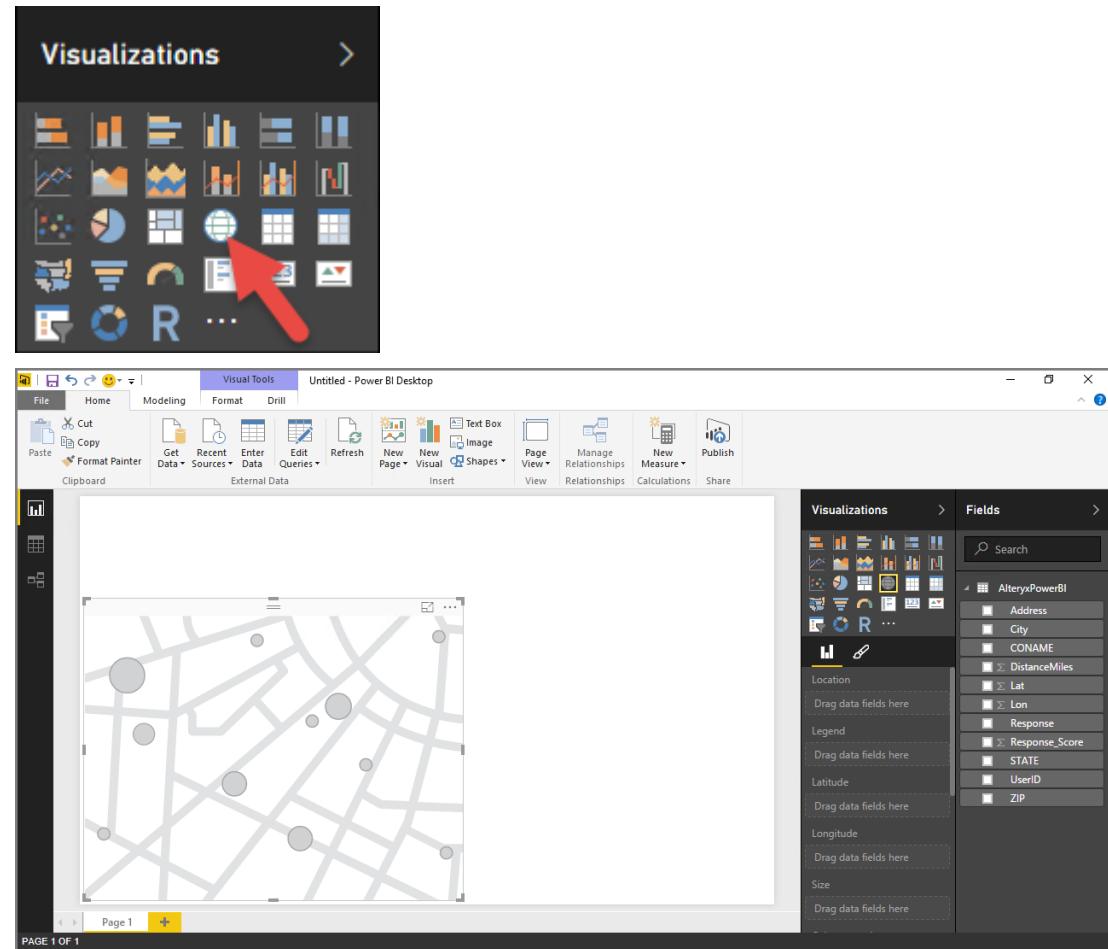
34. Verify that the Zip column is now properly formatted as a text column with a leading zero. Then **Click** the "File" menu, **Click** "Close & Apply"

The screenshot shows the Microsoft Power Query Editor interface. At the top, there's a "Prefix" dialog box with the instruction "Enter a text value to add to the front of each value in the column." A red arrow points to the "Value" input field, which contains "0". Another red arrow points to the "OK" button. Below the dialog, the main editor window has a "File" menu open. A red arrow points to the "Close & Apply" option in the menu. To the right of the menu, the Power Query ribbon is visible, showing the "Transform" tab selected. A red arrow points to the "Format" button in the ribbon. The data grid below shows columns for STATE, ZIP, and Lat. The ZIP column is highlighted with a yellow background, indicating it is selected.

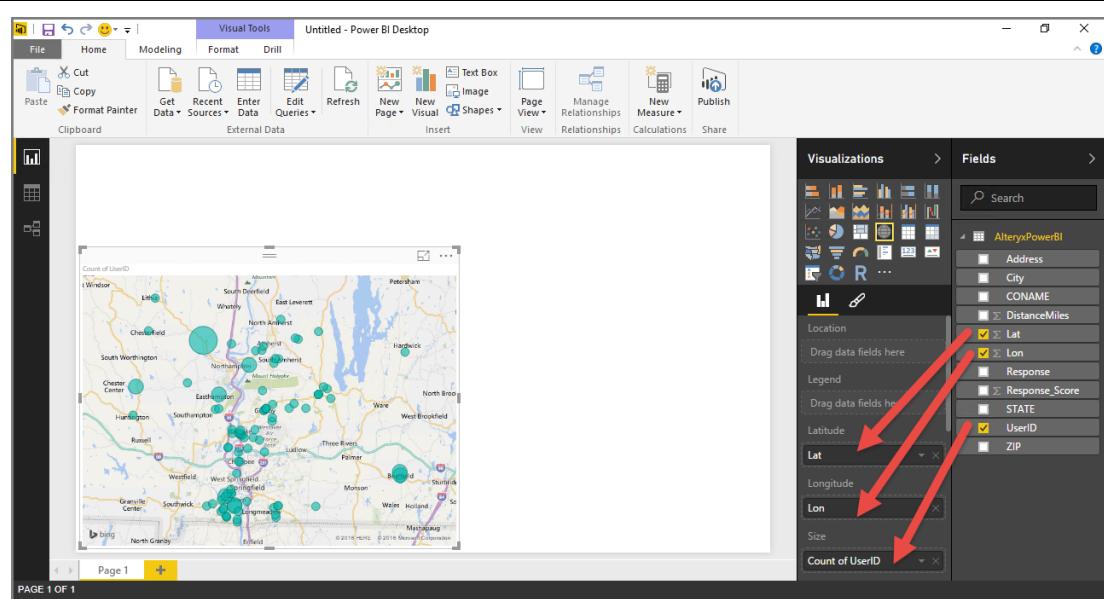
STATE	ZIP	Lat
MA	01001	42.0535
MA	01001	42.045
MA	01001	42.0724
MA	01001	42.0448
MA	01001	42.0
MA	01001	42.0
MA	01001	42.087
MA	01001	42.0536
MA	01001	42.0590
MA	01002	42.3317
MA	01002	42.3400
MA	01002	42.3

## Add the Map

35. Let's get started creating our report by adding a Map.
36. Click on the Map icon to add our Map. You can resize the map to make it a little larger if you would like.



37. There are 2 ways to set the location for the map: 1) we can set the Latitude and Longitude or 2) we can set the Location to a postal code. We are going to start with the 1<sup>st</sup> method.
- o **Drag** the 'Lat' Field to the 'Latitude' property of the Map
  - o **Drag** the 'Lon' Field to the 'Longitude' property of the Map
38. *Notice that the bubbles appear for our selections*
39. Let's make the size of the bubbles equal to the count of Users. **Drag** the 'UserID' field to the 'Size' property of the Map.
- o *Notice that it correctly sets the Size to the Count of UserID.*
  - o *Further notice that the relative size of the bubbles has changed to reflect the count of users (customers)*



40. As mentioned, you can also use the Postal code in Location in the Map.

- o **Remove** the 'Lat' and 'Lon' properties by either unchecking them or clicking on the x next to each in the properties of the Map
- o **Drag** the 'ZIP' property to 'Location' property of the Map

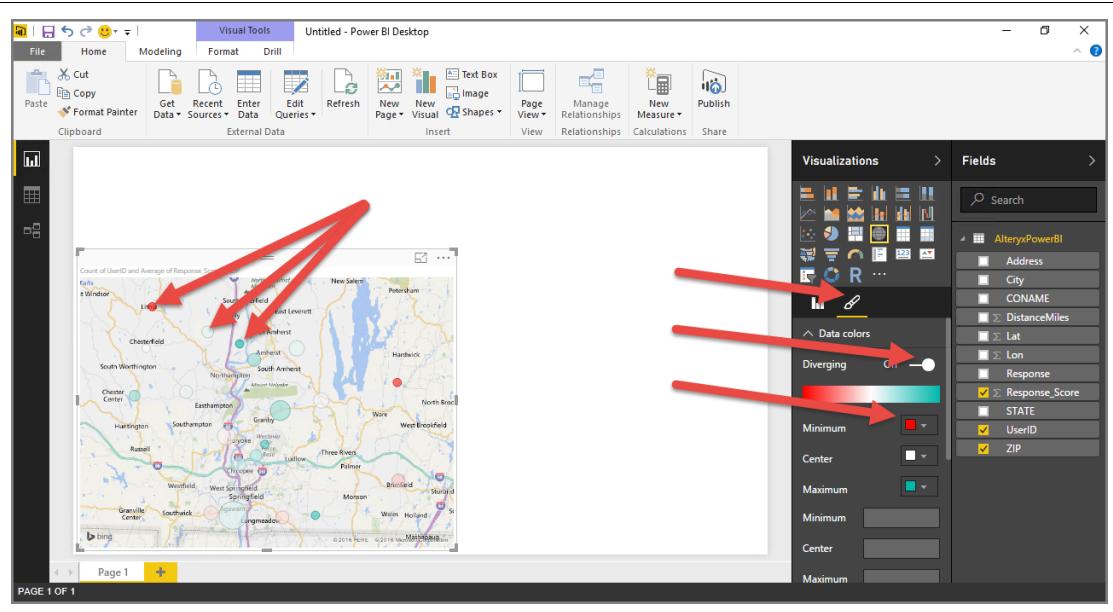
The screenshot shows the Alteryx Power BI interface. On the left is the 'Visualizations' pane, which contains various chart and map icons. On the right is the 'Fields' pane, which lists data fields under the 'AlteryxPowerBI' schema. A red arrow points from the 'ZIP' field in the 'Fields' pane to the 'ZIP' dropdown in the 'Location' section of the visualization builder.

Field	Type	Status
Address	Text	unchecked
City	Text	unchecked
CONAME	Text	unchecked
DistanceMiles	Text	unchecked
Lat	Text	unchecked
Lon	Text	unchecked
Response	Text	unchecked
Response_Score	Text	checked
STATE	Text	unchecked
UserID	Text	checked
ZIP	Text	checked

41. We can use the 'Color Saturation' of the bubbles to reflect another property on our data. Let's set it to reflect the Average Response Score.
42. Drag the "Response Score" field to the "Color Saturation" Property of the Map
43. Set the value of Color saturation to the Average of Response\_Score by **clicking** on the triangle in the 'Color saturation' text box and **choosing "Average"**.
44. The saturation of the bubbles now reflects the average response score.

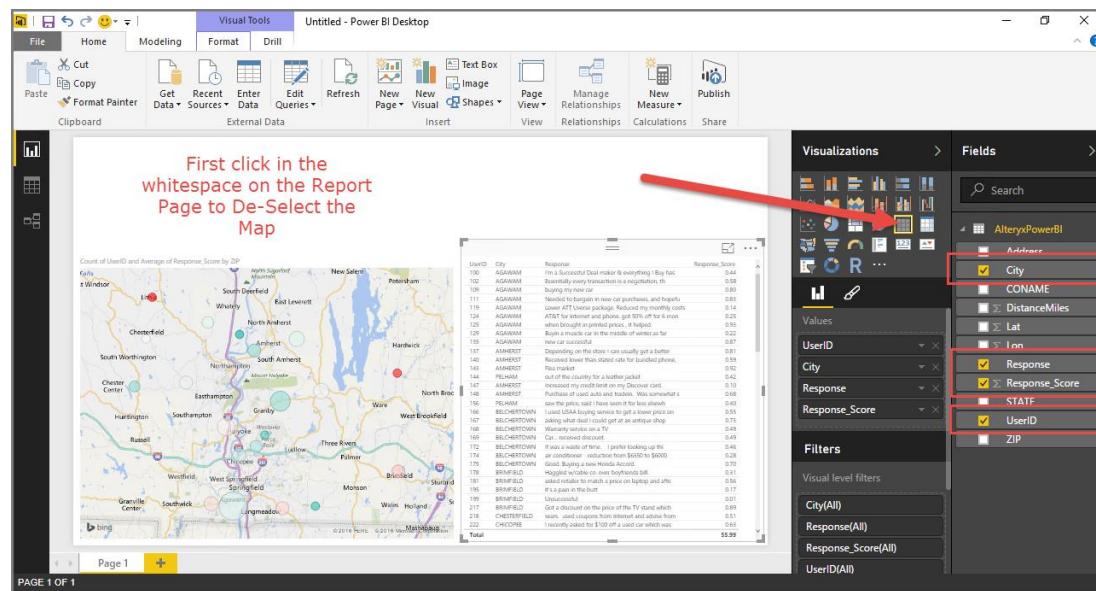
The screenshot shows the Alteryx Power BI interface. On the left, under 'Visualizations', there is a map visualization. On the right, the 'Fields' pane is open, showing a list of fields from the 'AlteryxPowerBI' dataset. The 'Address', 'City', 'CONAME', 'DistanceMiles', 'Lat', and 'Lon' fields are listed. A red arrow points from the 'Color saturation' section of the visualization properties to the 'Average' option in the context menu of the 'AlteryxPowerBI' field list. The context menu also includes options like 'Remove field', 'Quick Calc', 'Sum', 'Minimum', 'Maximum', 'Count (Distinct)', 'Count', 'Standard deviation', and 'Variance'. The 'Average' option is highlighted with a checkmark.

45. However, we can improve this visualization by changing the colors of the saturation.
46. Click on the 'Format' Icon under Visualizations. It looks like a paint brush.
47. Click on the control next to 'Diverging' to turn 'Diverging Colors' to 'On'
48. Set the 'Minimum' to a Red color. Now notice the Bubbles in the Map plainly illustrate the Average Sentiment – by location.



## Add the Table

49. Let's add the table that showed the raw response data next to the Map.
50. (Important) Click on the whitespace next to the Map. You need to make sure that the map is not selected, or when you try to add the Table, you will change the Map to a Table. Make sure you have selected the report itself.
51. Click on the "Table" icon under Visualizations. You can resize this to taste.
52. Now we need to add the fields to the table
53. Check the checkbox next to the following fields:
  - o UserID
  - o City
  - o Response
  - o Response\_Score
54. Click on any of the Bubbles in the Map and you will see that the Table is automatically filtered.



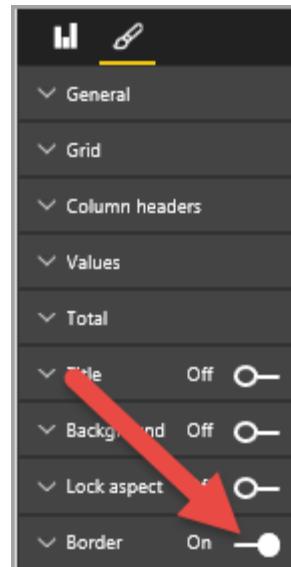
55. You can make the report a bit cleaner by adding a border to both the Map and the Table

56. Click on the Table | Click on 'Format'

57. Set the 'Border' property to 'On'

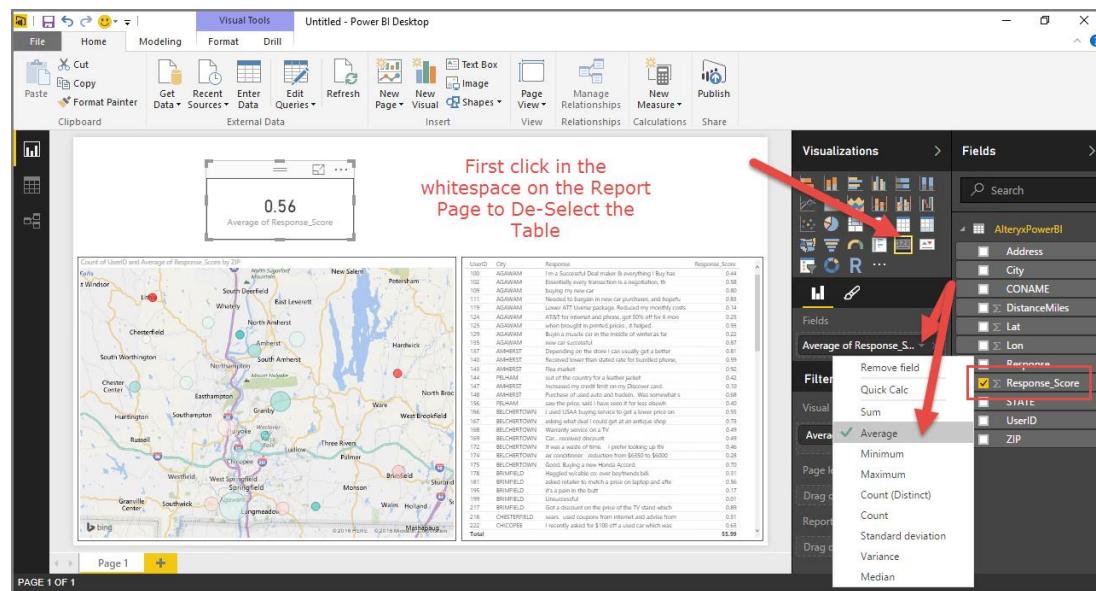
58. Repeat for the Map

59. Resize the controls to taste



## Add the Cards

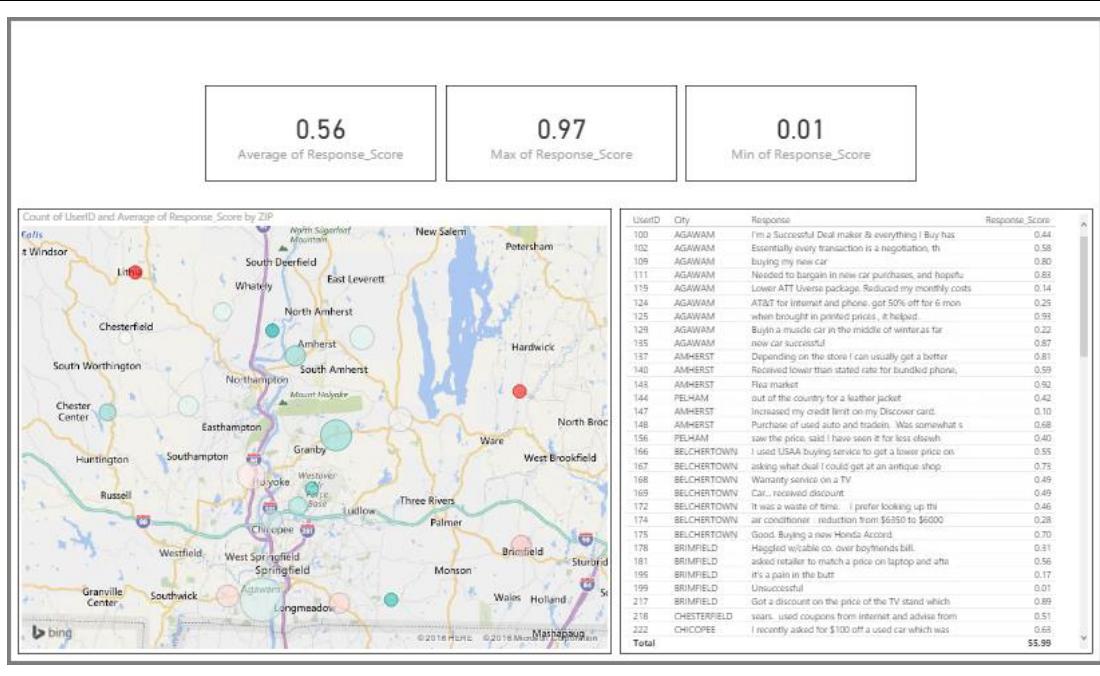
60. Next we want to add in the individual cards. Cards are good for showing off important numbers. Let's add cards for the following:
  - o Average of Response Score
  - o Max of Response Score
  - o Min of Response Score
61. If you don't have enough room for the cards on top of the Map and Table, **move** the Map and Table down and resize to taste.
62. Again, **make sure** you have selected whitespace in the report and not a specific control.
63. **Click** on the "Card" icon under 'Visualizations'
  - o **Resize** the card to an appropriate size above the map – remember we will have 3 cards – so leave room.
  - o With the card selected, **check** "**Response\_Score**" from the Fields
  - o **Click** the triangle next to "**Response\_Score**" in the properties for the visualization and choose 'Average'
64. You can **add a border** to the card by clicking on the "**Format**" icon and Turning the "**Border**" on. Make sure the Card is selected while doing this.



65. Create Max of Response Score Card

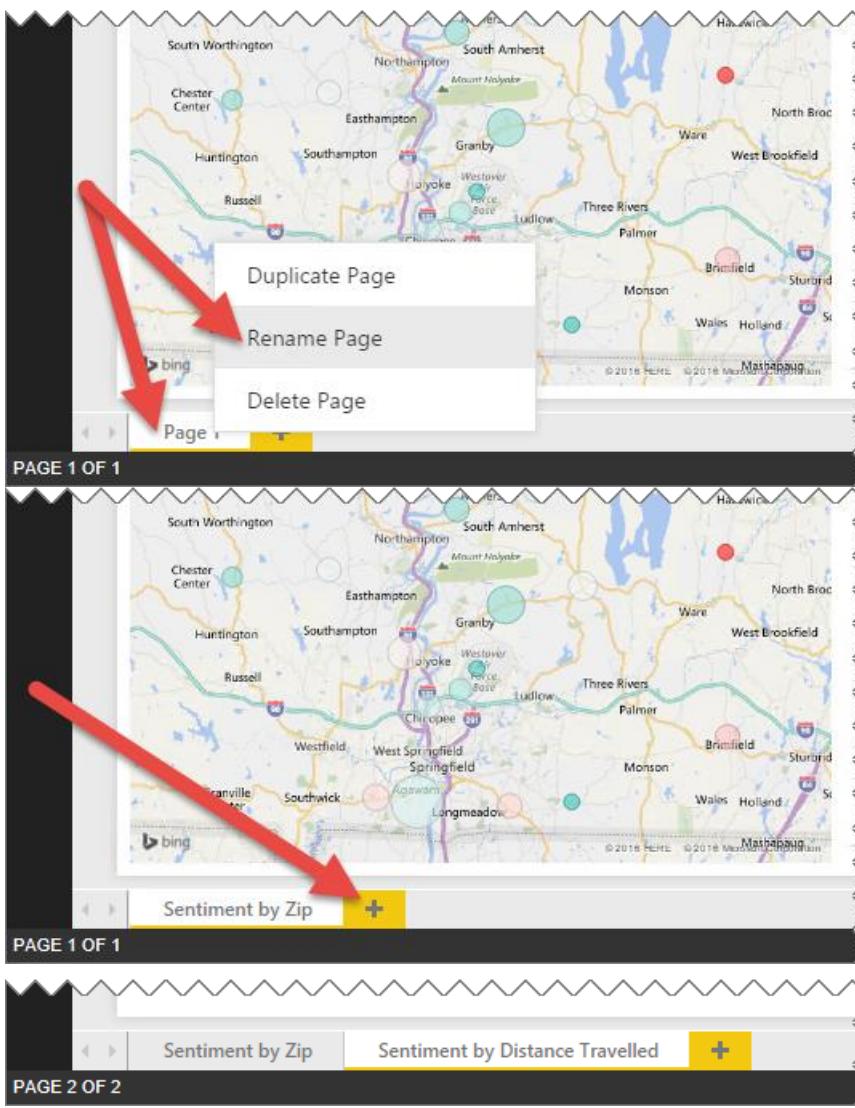
- o **Copy** and **Paste** the Card you just created
- o **Move** the newly pasted card to the center top of the report
- o **Select** the Card
- o **Click** the triangle next to "**Response\_Score**" in the properties for the visualization and choose "**Maximum**"

66. **Repeat** step 65 for **Minimum** of Response Score – moving it to the Top Right of the screen



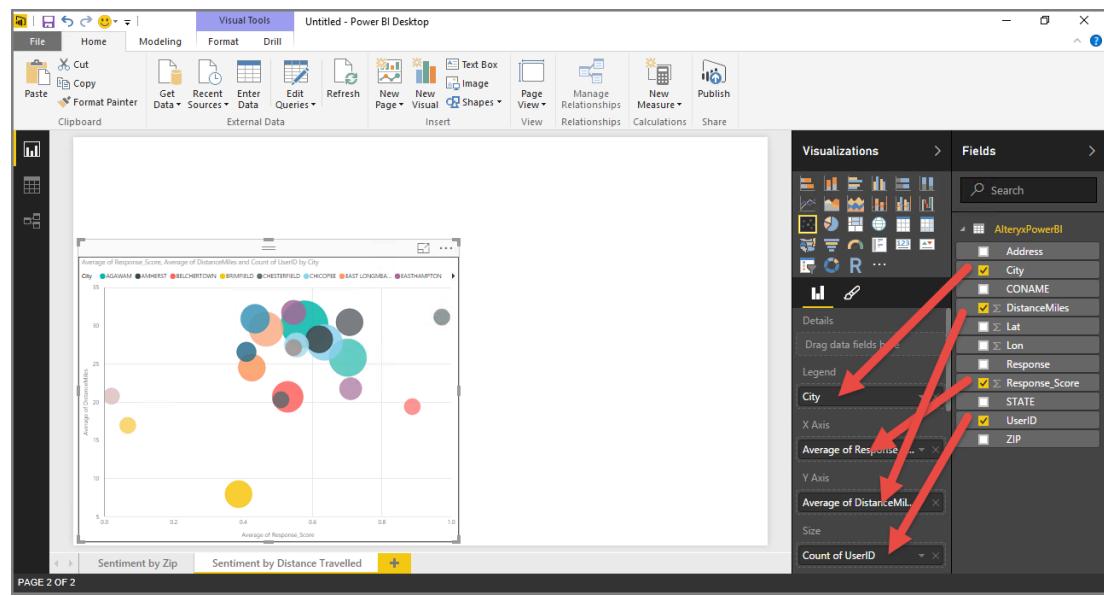
## Add the 2<sup>nd</sup> Page to the Report

67. **Rename "Page 1" to "Sentiment by Zip"**
  - o Right-Click the "Page 1" tab at the bottom of the window
  - o Select "Rename" from the menu
68. **Double-Click** on the 'Page 1' Tab at the bottom of the screen. Delete 'Page 1' and type in 'Sentiment by Zip'
69. Add a new page to the report by **clicking** on the "+" button.
70. **Rename** the new page to "**Sentiment by Distance Travelled**"



## Add a Scatter Chart to the new Page

71. Click anywhere on the new report page.
72. Click on "Scatter Chart" from the Visualizations. Resize appropriately.
73. Remember that we want to plot 'Average of Distance in Miles' against 'Average of Response Score'. This will tell us if there may be a correlation between distance and sentiment.
74. Drag "Response\_Score" to "X Axis" and set it to "Average" by clicking on the triangle and choosing "Average"
75. Drag "DistanceMiles" to "Y Axis" and set it to "Average" by clicking on the triangle and choosing "Average"
76. Drag "UserID" to "Size" and set it to "Count" by clicking on the triangle and choosing "Count".
77. Drag "City" to "Legend"
78. Add a border to the Scatter Chart



79. **Copy** the Table from the “**Sentiment by Zip**” Page to this new page.

- **Click** on the “**Sentiment by Zip**” tab at the bottom of the page.
- **Click** on the Table visualization
- **Type** Ctrl+C
- **Click** on the “**Sentiment by Distance Traveled**” tab at the bottom of the page.
- **Click** on whitespace in the report page
- **Type** Ctrl+V

80. **Click** on any of the bubbles in the scatter chart and notice that the table is automatically filtering.



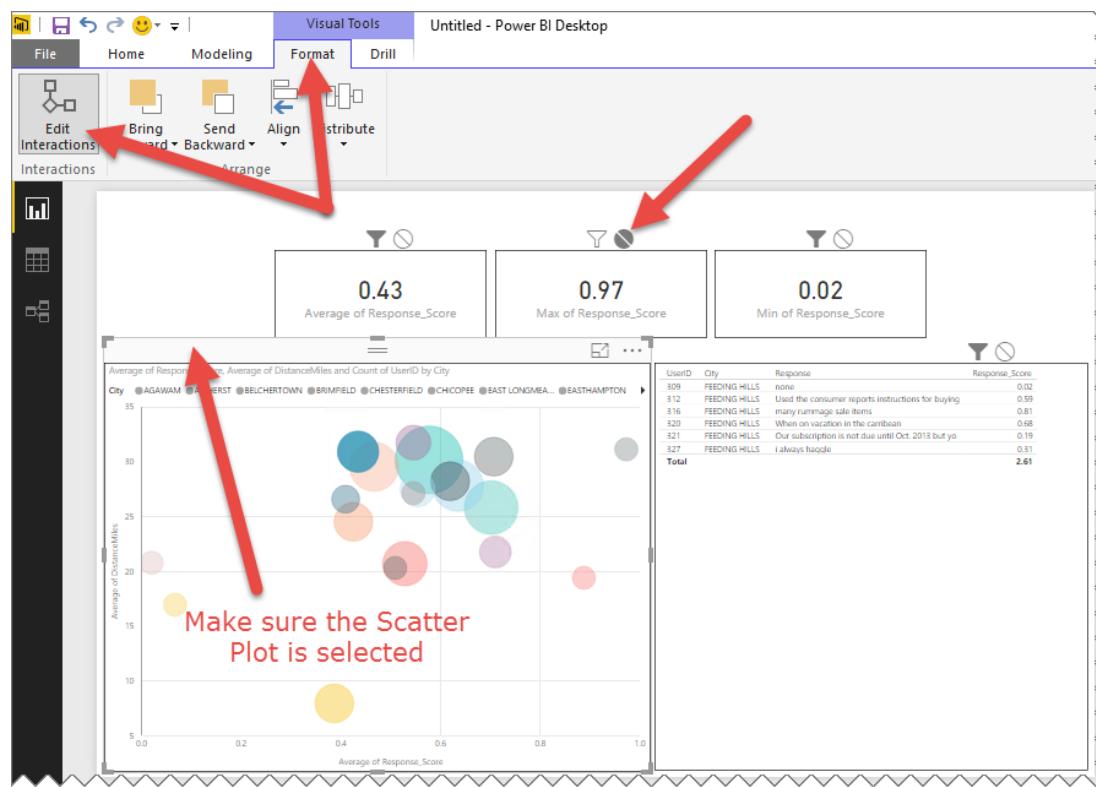
81. **Copy** the Cards from the 'Sentiment by Zip' page to the 'Sentiment by Distance Traveled' page

- o **Click** on the 'Sentiment by Zip' tab at the bottom of the page.
- o **Select** each of the 3 cards at the top by holding down the Ctrl button and clicking each card
- o **Type** Ctrl+C
- o **Click** on the 'Sentiment by Distance Traveled' tab at the bottom of the page.
- o **Click** on whitespace in the report page
- o **Type** Ctrl+V
- o **Position** the items properly



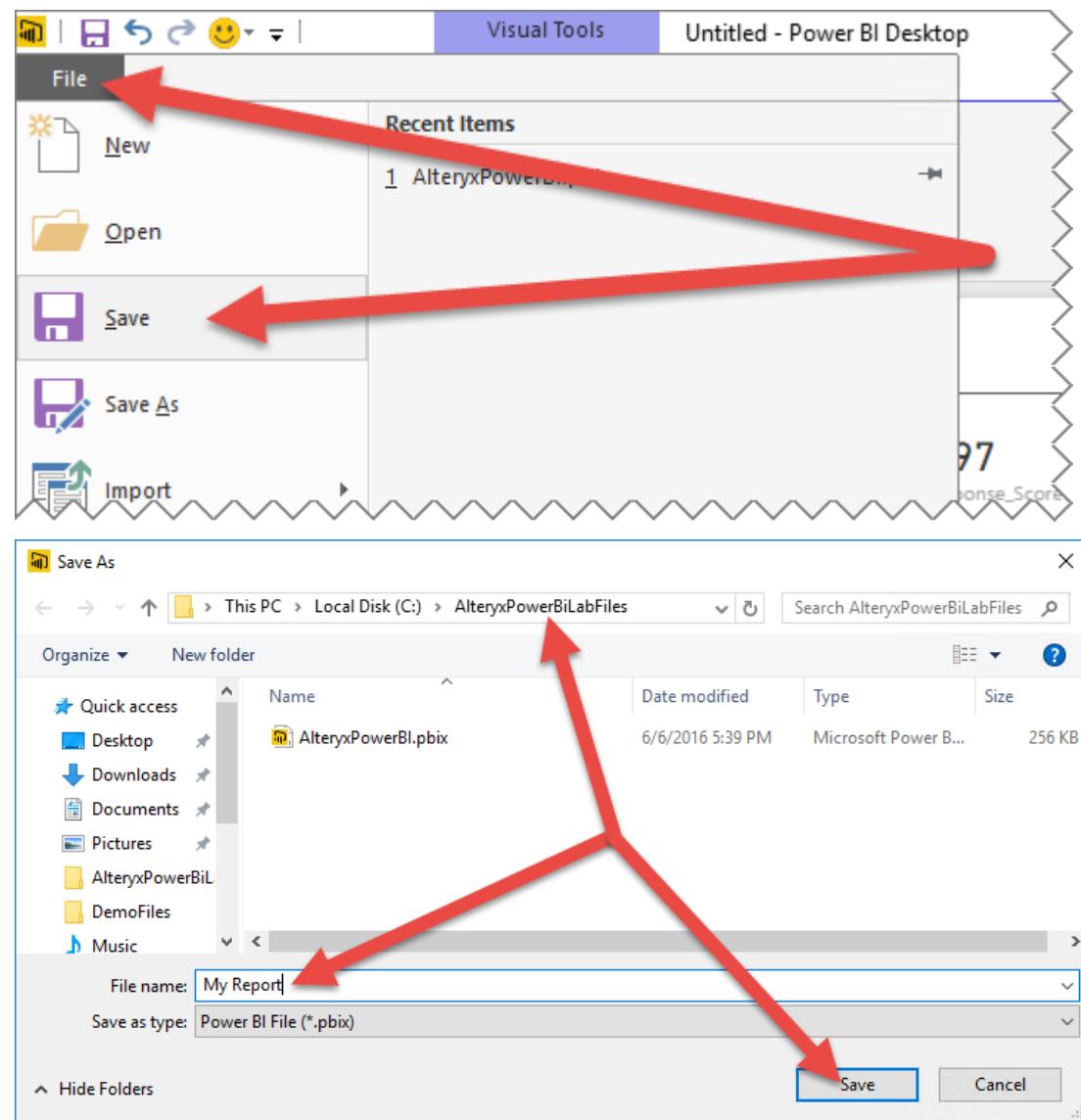
## Change the filtering behavior

82. Click on differing bubbles in the scatter chart. Notice that each of the cards and the Table are automatically filtered.
83. Assume that you did not want the 'Max of Response\_Score' Card to be filtered when you clicked on the Scatter Chart.
84. Click on the Scatter Chart
85. Click the "Format" ribbon tab along the top, the Click the "Edit Interactions"
86. Click on the "None" icon on the "Max of Response\_Score" Card
87. Click on the "Edit Interactions" button again to turn it off.
88. Now click on differing bubbles again in the scatter chart. Notice that the "Max of Response\_Score" card is no longer being filtered, while the other controls are.
89. To stop the filtering, click on empty space within the Scatter Plot.



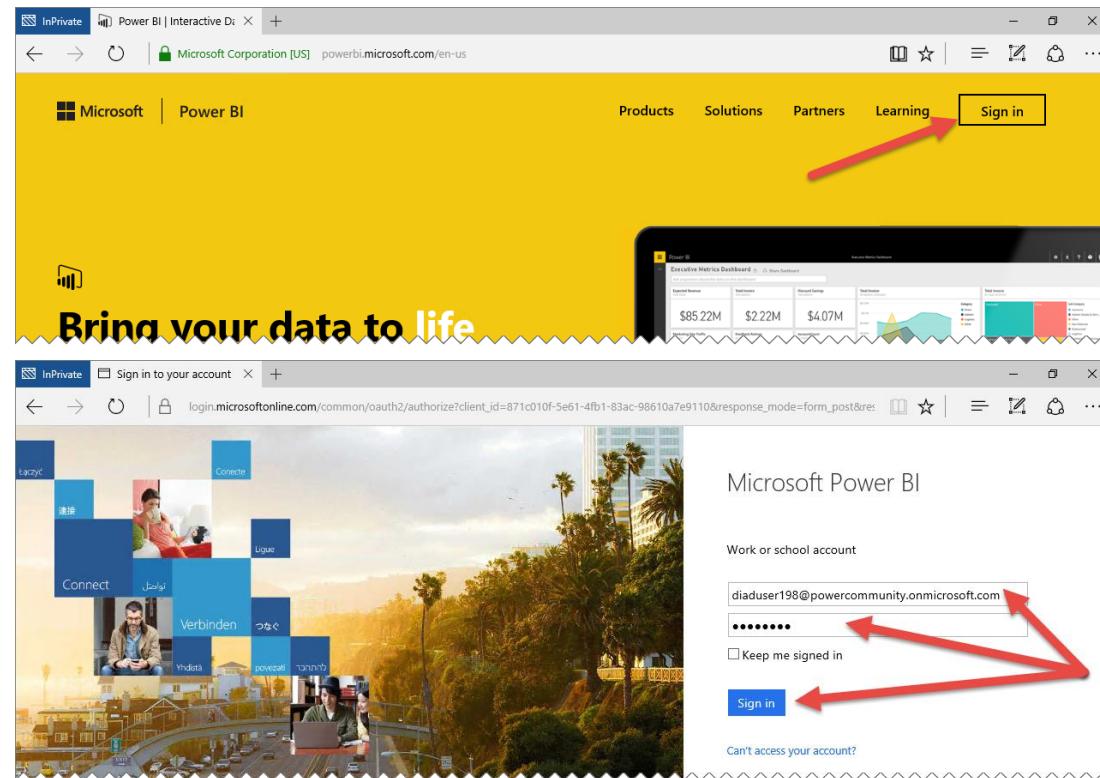
## Save the Report

90. From the "File" menu, **select "Save"**
91. **Name** the report "My Report", or some other name that makes sense to you and save it in the same folder where you extracted the "AlteryxLabFiles.zip" file.
92. **Click "Save"** to save the report.

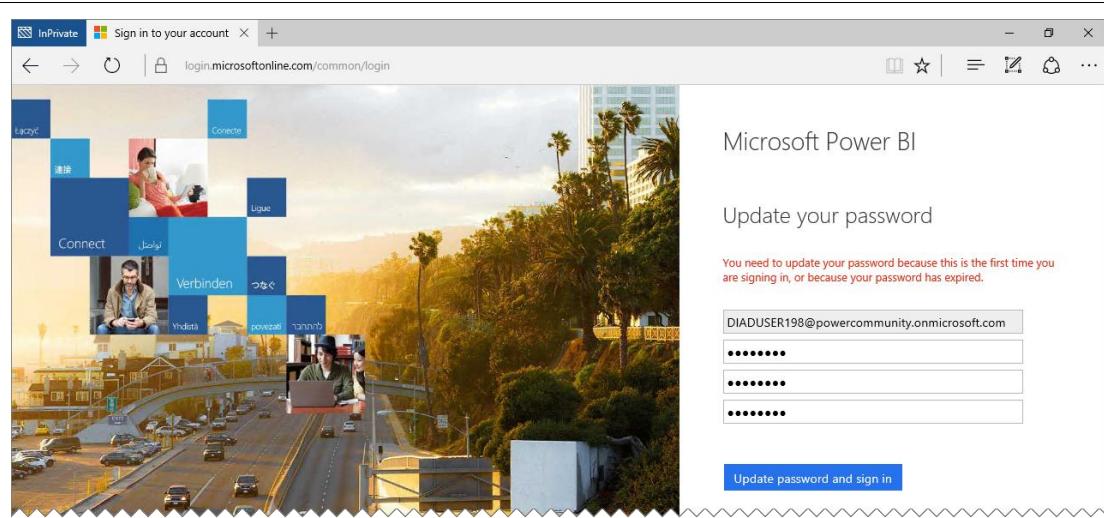


## Log In to the Power BI Service

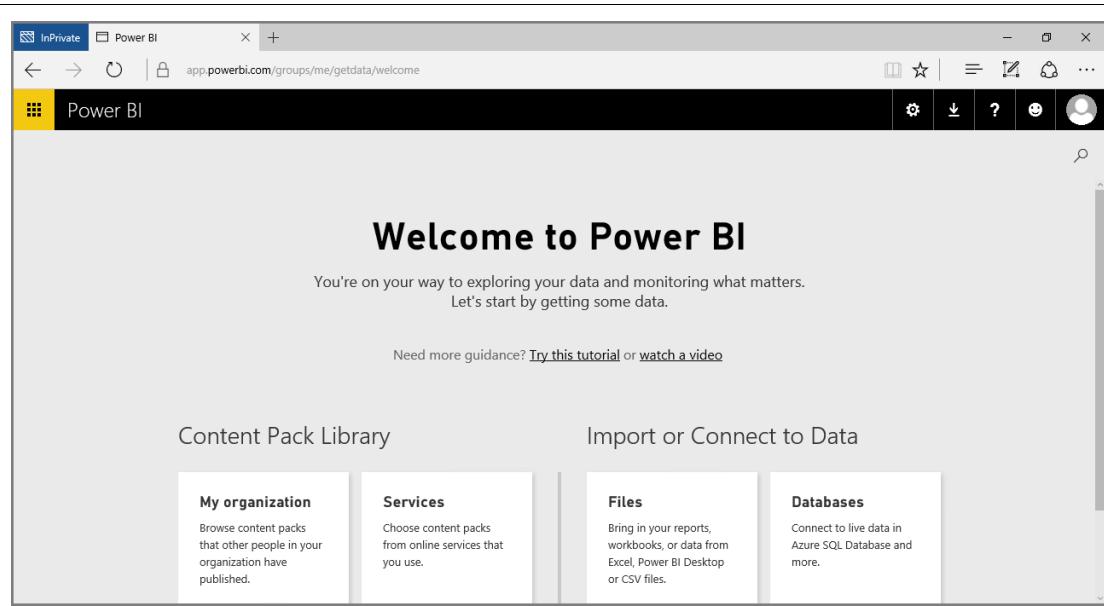
93. In the next section, you will publish the report you created up to the Power BI Service. **Before you can do that, we need to ensure that you can successfully log in to the Power BI Service with your Account.**
94. You need to have a valid Power BI account. You can either:
- Sign up for one of your own using a "corporate email address" (not an outlook.com, yahoo.com, gmail.com, etc. type of address) here:  
<https://powerbi.microsoft.com/en-us/get-started/>
  - Use one of the [DIADUserXXX@powercommunity.onmicrosoft.com](mailto:DIADUserXXX@powercommunity.onmicrosoft.com) accounts provided at the event.
95. Open a browser, and go to <http://powerbi.usercom>, then click the "Sign in" button



96. If you are prompted to update your password, do so. **MAKE SURE TO REMEMBER THE NEW PASSWORD.**

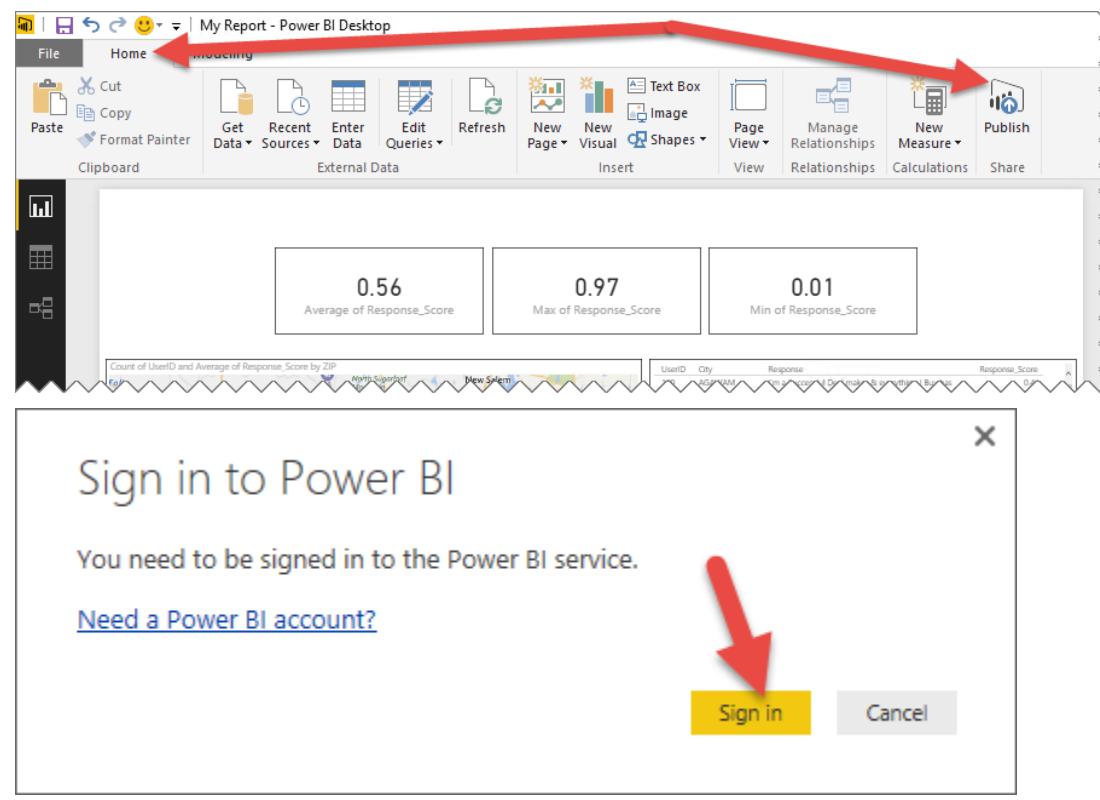


97. Once you have successfully logged in, you should see the Power BI Service in the browser. **We don't need to do anything else here right now, we just needed to make sure we could log in.**

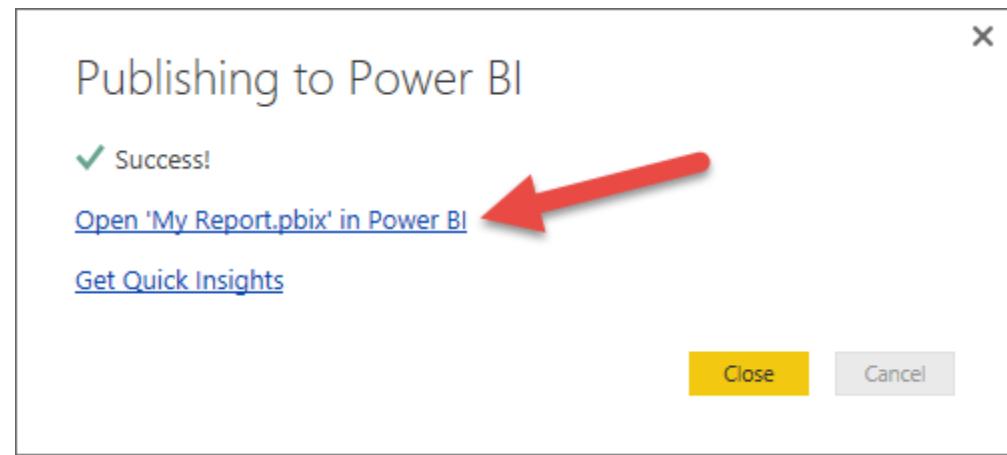
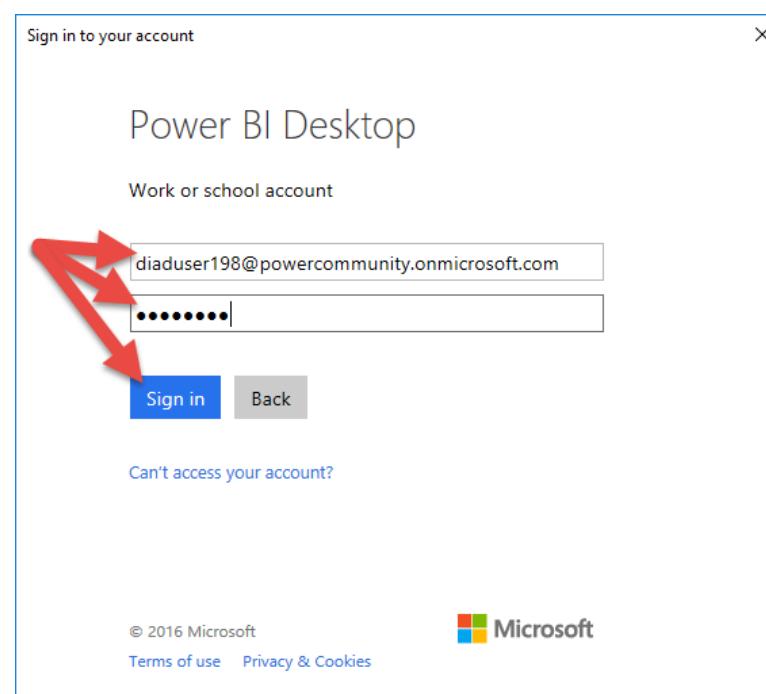


## Publish the Report to the Power BI Service

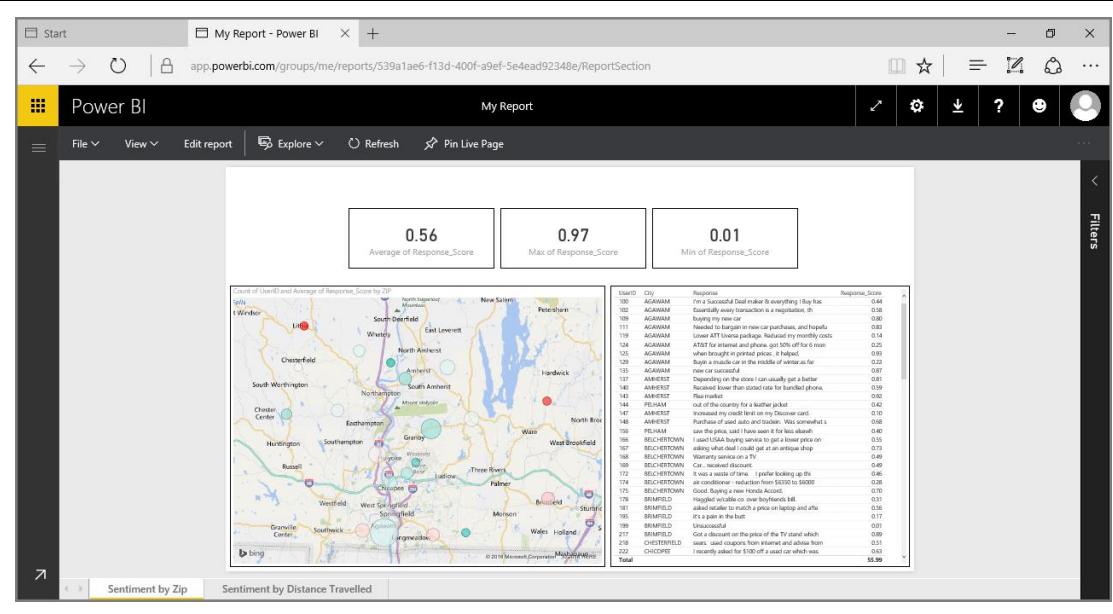
98. **Return to Power BI Desktop** and ensure that the **report** we created previously is **open**.
99. **Click the "Sentiment by Zip" page** to ensure it is the default page when the report is published.
100. **Click the "Home" ribbon** along the top, then **click the "Publish"** button.
101. In the "Sign in to Power BI" window, **click "Sign in"**



102. **Login** with the credentials you just verified in the previous section. Remember that you may have had to change your password to something new.
103. When the publish succeeds, **click** the "**Open 'My Report.pbix' in Power BI**" link



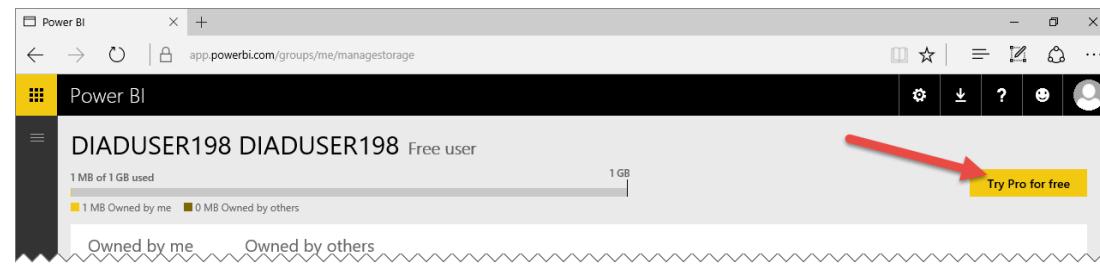
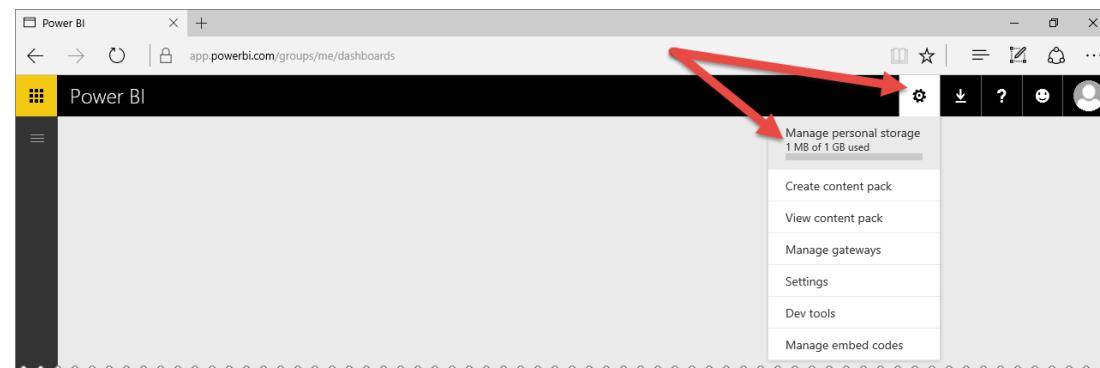
104. You should see your report open in the Power BI App in the browser. Verify that everything you created in the Power BI Desktop app is present and functional.



#### OPTIONAL – Open a Content Pack

IF YOU WERE UNABLE TO PUBLISH IN THE PREVIOUS STEP, THIS WILL GIVE YOU A WAY TO CONTINUE WITH THE LAB WITH A PRE-EXISTING REPORT. YOU CAN FOLLOW THESE STEPS EVEN IF YOU SUCCUSSFULLY PUBLISHED IF YOU WOULD LIKE TO SEE HOW TO CONSUME A CONTENT PACK.

105. To use a "Content Pack" you need to upgrade your Power BI account to a "Pro" account by starting a free trial.
106. **Return** to the browser and if necessary, **sign into** the <https://app.powerbi.com> service with your verified credentials.
107. **Click** the "Gear" icon in the top right corner, then select "Manage personal storage" to access your account settings.
108. **Click** the "**Try Pro for free**" button.



109. Click the "Start Trial" button in the "Start 60-day free Pro trial" window.

110. Click "Close" to close the free trial confirmation.

### Start 60-day free Pro trial

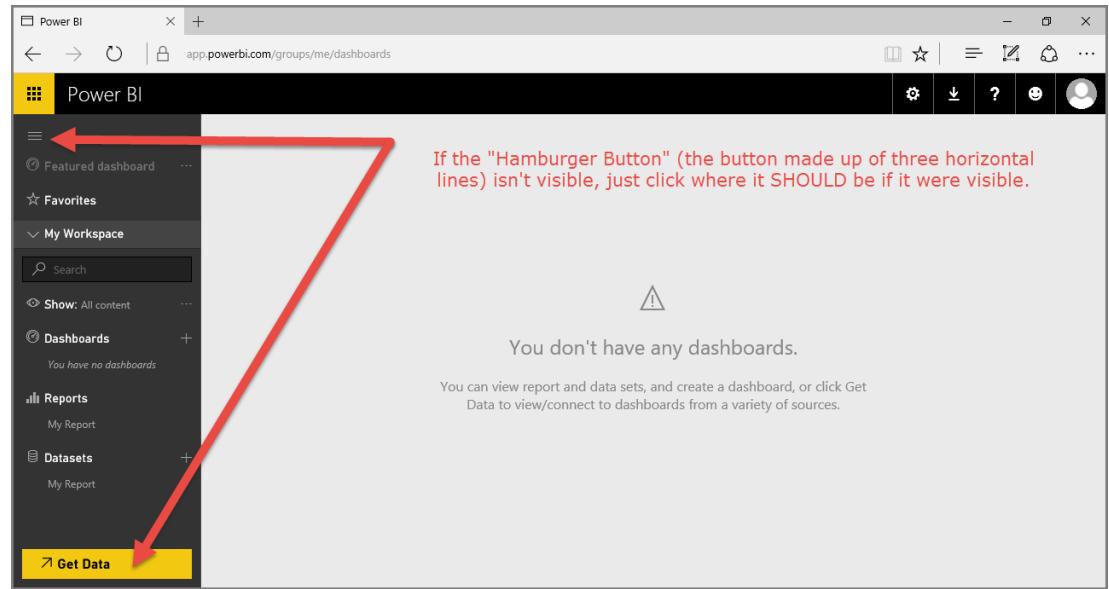
Here's your chance to try the many features of Power BI Pro, such as groups and scheduled data refreshes. [Learn more](#)

By clicking "Start trial" you agree to the [terms and conditions](#).

**Start trial**

Cancel

111. If the "Get Data" page is not being displayed, you can click the **Hamburger Button** in the top left corner, then click "Get Data".



112. On the "Get Data" page, click the under "My organization", click the "Get" button
113. Click the "Get" button for the "Alteryx Power BI" content pack.

The screenshot shows the Power BI 'Get Data' interface. At the top, there's a navigation bar with icons for back, forward, refresh, and search, along with a URL bar showing 'app.powerbi.com/groups/me/getdata/myorg'. Below the navigation is a dark header bar with the 'Power BI' logo and various settings icons. The main content area has a title 'Get Data' and a sub-section 'Content Pack Library'. It includes sections for 'My organization', 'Services', 'Files', and 'Databases', each with a 'Get' button. A red arrow points from the text in step 112 to the 'Get' button under 'My organization'. Below this is a 'Samples' section. To the right is a 'Import or Connect to Data' section. At the bottom, a modal window titled 'Content packs for Power BI' is open, showing tabs for 'Services' and 'My organization'. The 'My organization' tab is selected, displaying two content packs: 'alteryx' (selected) and 'vandars sales'. Each pack has a 'Get' button, and a red arrow points from the text in step 113 to the 'Get' button for the 'alteryx' pack. A search bar at the top of the modal contains the placeholder 'Search content packs'.

114. You should now see an "AlteryxPowerBI" Dataset, Report and Dashboard, and the Dashboard should be displayed. This is basically the same Dataset and Report we developed in this lab, and a copy of the Dashboard you will create in the following steps.

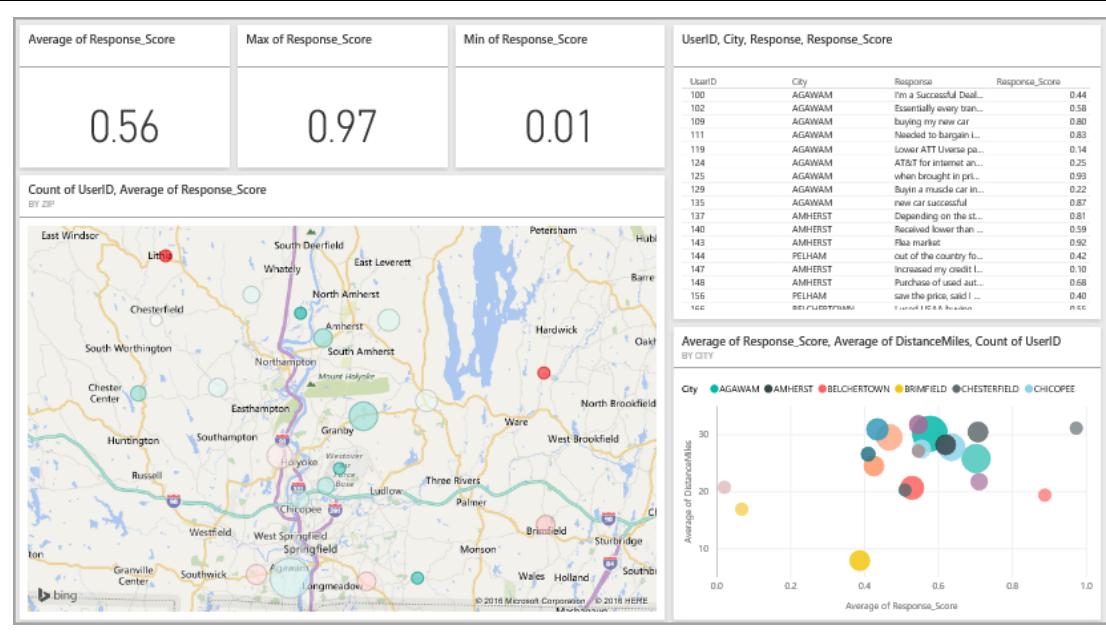
The screenshot shows the Power BI desktop application window. On the left, the navigation pane displays 'My Workspace' with items like 'Dashboards', 'Reports', and 'Datasets'. Two red arrows point from the text instructions to the 'Dashboards' and 'Reports' sections. The main workspace contains a dashboard titled 'ALTERYXPOWERBI'. The dashboard includes three measures: 'Average of Response\_Score' (0.56), 'Max of Response\_Score' (0.97), and 'Min of Response\_Score' (0.01). Below these is a map titled 'Count of UserID, Average of Response\_Score BY ZIP' showing locations in Massachusetts. To the right is a table titled 'Response\_Score BY USERID, CITY, RESPONSE' with data for various users across cities like AGAWAM, AMHERST, and BELCHERTON. At the bottom is another chart titled 'Count of UserID, Average of Distance BY CITY'.

## Create a Dashboard

115. We can easily create a dashboard by selecting visuals from our reports.
116. For the following steps you can use your own Report that you published previously, or if needed you can use the "AlteryxPowerBI" report from the content pack we imported in the previous section. Click on the "Hamburger Button" along the left to open your workspace panel, and select the Report you want to continue with.
117. **Navigate to** the 'Sentiment by Zip' Page of the report we just created.
118. **Click** on the 'Pin' icon for the Map to pin that visual to a report.
119. This will bring up a dialog box. You have the option to either choose an existing dashboard or create a new dashboard. In our case, **choose** 'New Dashboard' and name it something like 'My Dashboard'
120. **Repeat** the same steps for the following visuals, adding them to the same report:
  - o All 3 cards on 'Sentiment by Zip'
  - o The Table on 'Sentiment by Zip'
  - o The Scatter Chart on 'Sentiment by Distance Traveled'

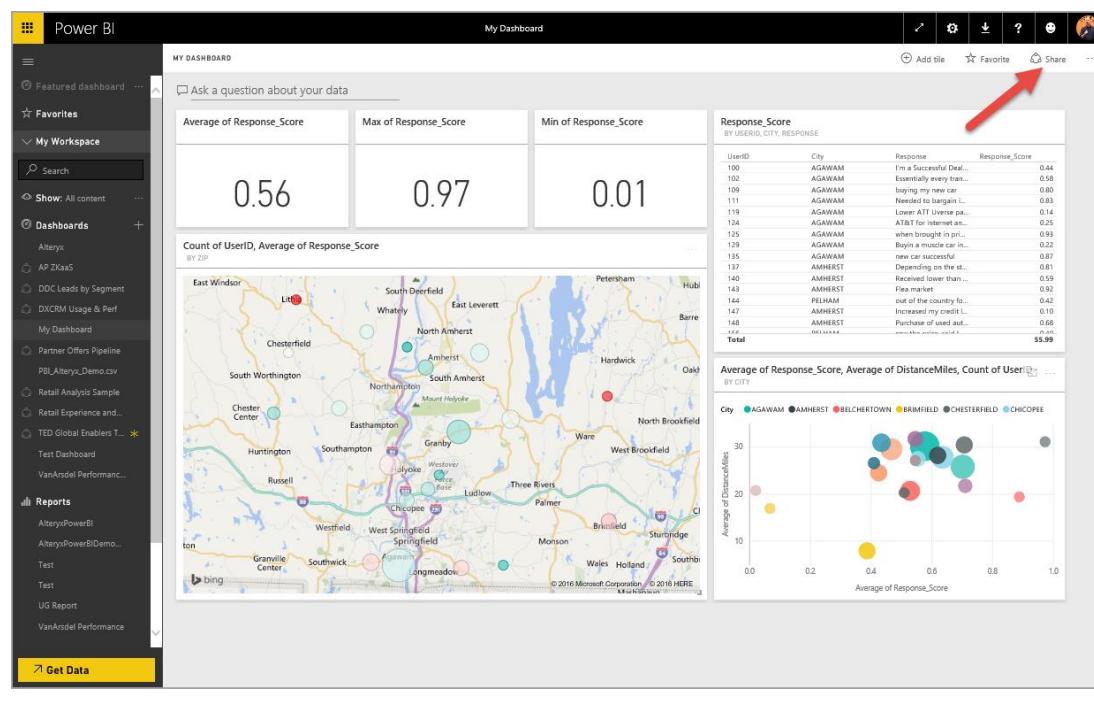
UserID	City	Response	Response_Score
100	AGAWAM	I'm a Successful Deal maker & everything I Buy has	0.44
102	AGAWAM	Essentially every transaction is a negotiation, th	0.58
109	AGAWAM	buying my new car	0.80
111	AGAWAM	Newed to bargain in new car purchases, and hopeful	0.85
119	AGAWAM	Lover ATT Uverse package. Reduced my monthly costs	0.14
124	AGAWAM	AT&T for internet and phone. got 50% off for 6 mon	0.25
125	AGAWAM	when brought in printed prices. It helped.	0.95
129	AGAWAM	Buyin a muscle car in the middle of winter as far	0.22
135	AGAWAM	new car successful	0.87
137	AMHERST	Depending on the store I can usually get a better	0.81
140	AMHERST	Depended lower than started rate for bundled phone,	0.59
143	AMHERST	Flea market	0.92
144	PELHAM	out of the country for a leather jacket	0.42
147	AMHERST	Increased my credit limit on my Discover card.	0.10
148	AMHERST	Purchase of used auto and trailers. Was somewhat s	0.68
156	PELHAM	see the price, said I have seen it for less elsewhere	0.40
166	BELCHERTOWN	I used USAA buying service to get a lower price on	0.55
167	BELCHERTOWN	asking what deal I could get at an antique shop	0.73
168	BELCHERTOWN	Warranty service on a TV	0.49
169	BELCHERTOWN	Cuz... received discount.	0.49
172	BELCHERTOWN	It was a waste of time. I prefer looking up the	0.46
174	BELCHERTOWN	air conditioner - reduction from \$6350 to \$6000	0.28
175	BELCHERTOWN	Good. Buying a new Honda Accord.	0.70
178	BRIMFIELD	Haggled w/cable co. over boyfriends bill.	0.31
181	BRIMFIELD	asked retailer to match a price on laptop and after	0.56
195	BRIMFIELD	it's a pain in the butt	0.17
199	BRIMFIELD	Unsuccessful	0.01
217	BRIMFIELD	Got a discount on the price of the TV stand which	0.89
218	CHESTERFIELD	seems used coupons from internet and advice from	0.51
		Total	55.99

121. **Navigate to 'My Dashboard' (or whatever you named your dashboard).**
122. **Drag and drop** the items so they match the dashboard pictured to the right. Keep in mind that you will have to resize the map.
123. *Congratulations, you have now created a report and a dashboard!*
124. *Next, it is time to share your dashboard...*



## Share your Dashboard

125. There are several ways for you to share dashboards, reports and tiles.
126. The first is to simply share it via email.
127. Click on the 'Share' link at the top right of the dashboard.
128. This will bring up a dialog.
129. Select 'Invite' and type the email addresses in the top box and, optionally, modify the message.
130. If any of the addresses is outside your organization, you'll see a warning.
131. To allow your colleagues to reshare your dashboard with others, check Allow recipients to share your dashboard. Only colleagues in your organization can reshare your dashboard. People outside your organization can view your dashboard but not reshare it.
132. Select Share – if you really want to share this dashboard.



133. Another way to share is to create 'Content Packs'
134. Content Packs allow you to publish reports and dashboards to: the entire organization, to distribution or security groups or office 365 groups.
135. Content packs are easily discoverable.
136. To see how easy it is to find Content Packs, do the following:
- o Click on 'Get Data' at the bottom left of the screen
  - o Click on 'Get' under 'My Organization'
  - o There you will see a list of Content Packs that are available to you.

The screenshot shows the Power BI service interface. On the left, there's a sidebar menu with sections like 'Power BI', 'Favorites', 'My Workspace', 'Search', 'Dashboards', 'Reports', and 'Get Data'. A red arrow points to the 'Get Data' button at the bottom of the sidebar. The main area displays a 'My Dashboard' titled 'Ask a question about your data'. It includes three summary cards: 'Average of Response\_Score' (0.56), 'Max of Response\_Score' (0.97), and 'Min of Response\_Score' (0.01). Below these are two visualizations: a map of the Northeastern United States with data points for cities like Agawam, Amherst, Belchertown, Erimfield, Chesterfield, and Chicopee; and a bubble chart showing the relationship between 'Average of Response\_Score' (X-axis, 0.0 to 1.0) and 'Average of DistanceMiles' (Y-axis, 0.0 to 30). A table titled 'Response\_Score' is also visible on the right side of the dashboard.

UserID	City	Response	Response_Score
100	AGAWAM	I'm a successful deal...	0.44
102	AGAWAM	Essentially every time...	0.58
109	AGAWAM	buying my new car...	0.80
111	AGAWAM	Needed to bargain...	0.83
113	AGAWAM	AT&T for internet an...	0.14
124	AGAWAM	when brought in pri...	0.25
125	AGAWAM	Buy a muscle car in...	0.93
129	AGAWAM	Buy a car online in...	0.22
135	AGAWAM	Depend on the st...	0.87
137	AMHERST	Received lower than ...	0.61
140	AMHERST	Flea market	0.59
143	AMHERST	out of the country fo...	0.92
144	PELHAM	Increased my credit l...	0.42
147	AMHERST	Purchase of used aut...	0.10
148	AMHERST	...nchandise, used a...	0.68
Total			55.99

# Get Data

Need more guidance? [Try this tutorial](#) or [watch a video](#)

## Content Pack Library

**My organization**

Browse content packs that other people in your organization have published.

**Services**

Choose content packs from online services that you use.

**Files**

Bring in your reports, workbooks, or data from Excel, Power BI Desktop or CSV files.

**Databases**

Connect to live data in Azure SQL Database and more.

[Get ↗](#)

[Get ↗](#)

[Get ↗](#)

[Get ↗](#)

[Samples](#)

## Import or Connect to Data

**Content packs for Power BI**

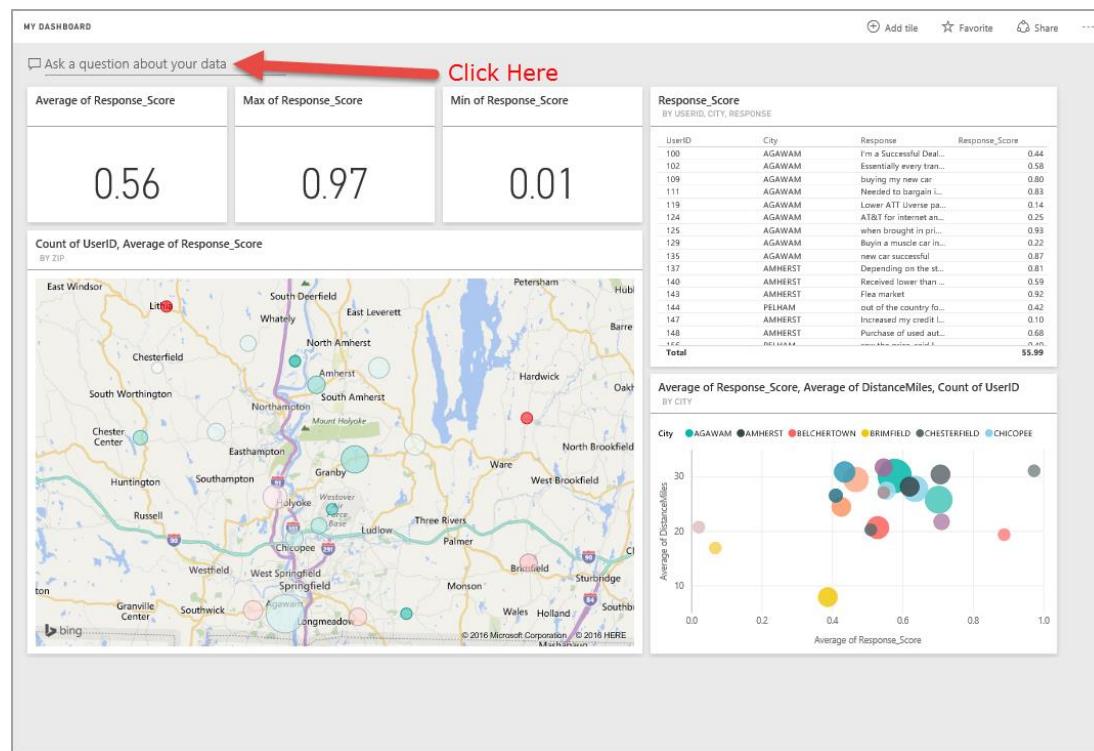
[Services](#) [My organization](#)

Category	Name	Action
alteryx	Alteryx Power BI	<a href="#">Get</a>
vandars sales	new content	<a href="#">Get</a>

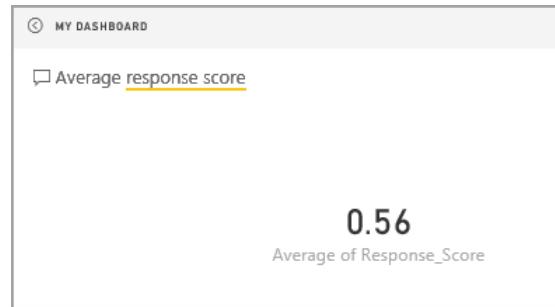
## Q & A in Power BI – Using Natural Language Query

137. Sometimes the fastest way to get an answer from your data, is to ask a question using natural language. For example, "what were total sales last year." Use Q&A to explore your data using intuitive, natural language capabilities and receive answers in the form of charts and graphs. Q&A is different from a search engine -- Q&A only provides results about the data in Power BI.

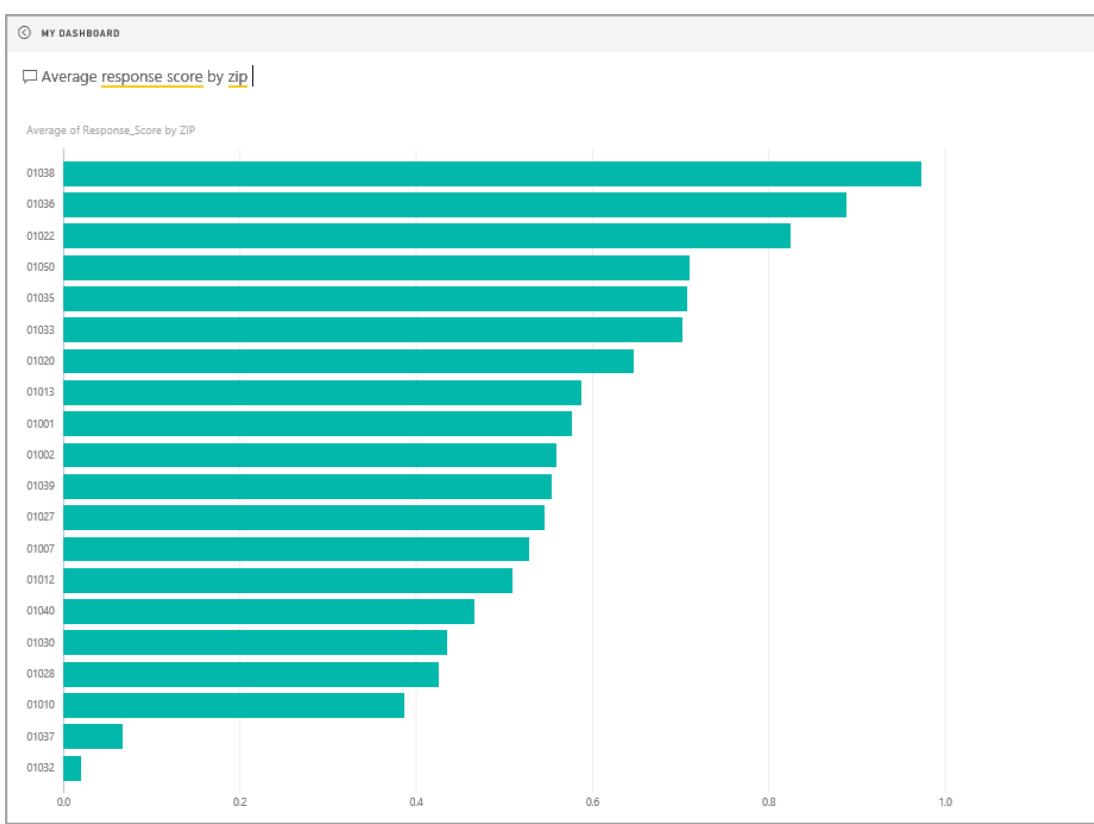
138. To start, in your dashboard, **click** where it says to 'Ask a question about your data.'



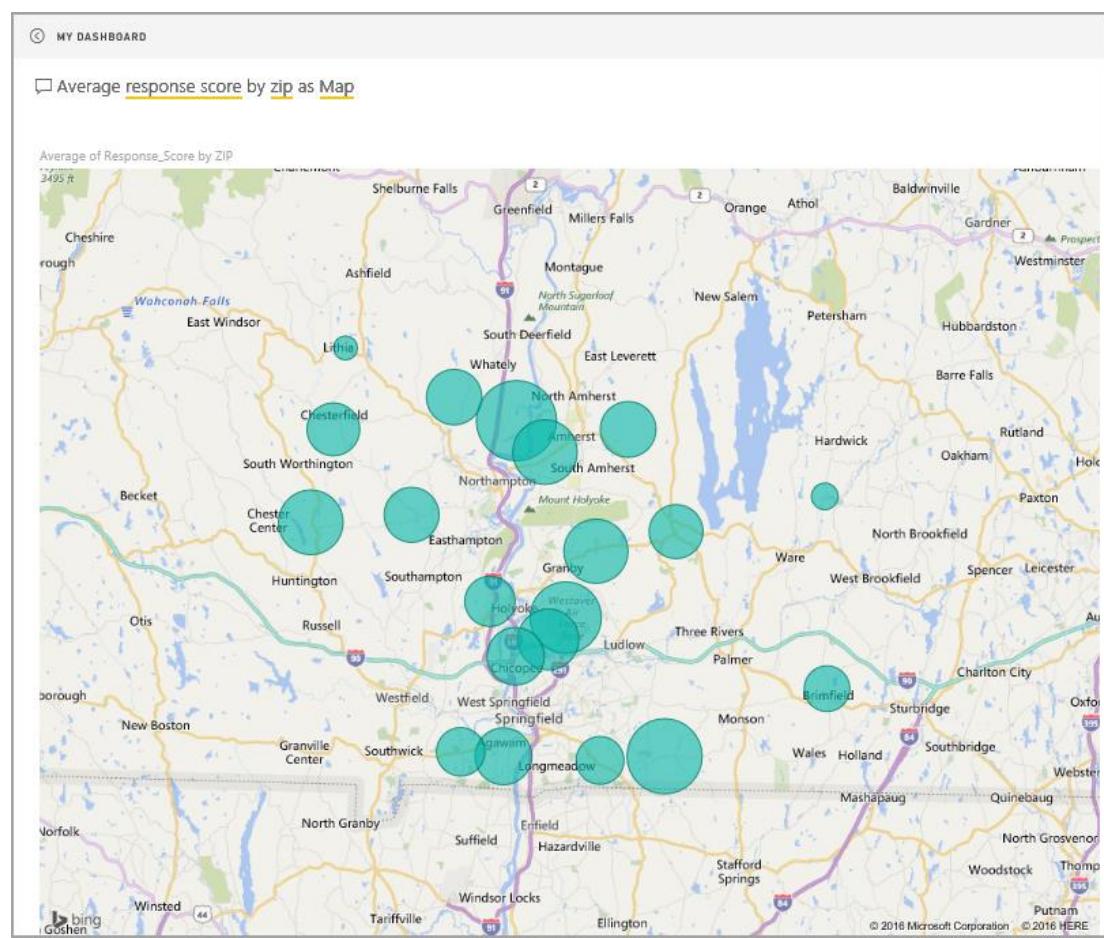
139. **Start by typing:** 'Average response score'



140. **Update** it to be 'Average response score by zip'



141. **Update** it to be 'Average response score by zip as Map'



142. Continue asking your own questions of the data