

Using ArcGIS Online to increase youth access to service providers in
Wake County ,NC

By

Thomas Ray

Jake Evans

Sagar Nemani

Sharat Nemani

Nicole Solera

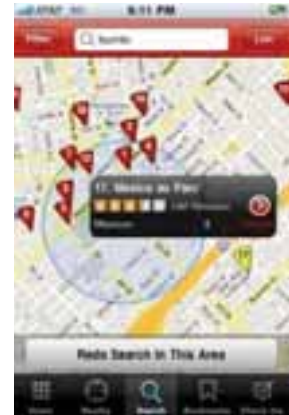
Wake County 4-H Youth Development

GIS MAPPING INITIATIVE

Lots of people use global positioning systems (GPS) in more ways than they probably even realize. While originally, GPS satellites were intended for military purposes, today they play a role in everything



from time and banking to helping you find your new favorite restaurant. The reality is that GPS and Geographic Information Systems (GIS) play a major role in everyday



life emphasizing the importance of geography to how we make decisions for ourselves as well as how we influence our friends and family. Using GPS can also be a lot of fun.

We are going to head outside and put that satellite system to work. Geospatial

Revolution: Mapping Power to the People. By creating a source of information,

you will be placing power in the hands of your neighbors, friends and family who live in your community – the power to make decisions and the power to advocate for change. Never underestimate the value of what you are providing.



You can watch the rest of the Geospatial Revolution video series on your own by visiting <http://geospatialrevolution.psu.edu>. Our project will be very similar to the one in

Kibera in that we will also be mapping resources for health care and education, but ours will be a little different because we will be mapping only those that serve youth.

What are some of the resources (also called assets) that you think we will need to map in our communities?

GIS & GPS

Data collection can really be a lot of fun, especially when it gives you a chance to



learn more about your own community. Through this process you will probably verify some information that you already knew as well as learn some things you never imagined. The proper collection of information is critical to the success

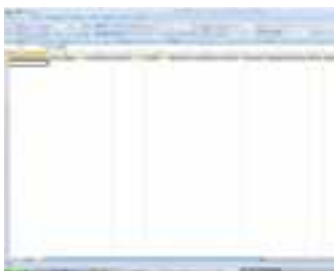
of our project. We want to avoid future frustration by making sure that our data is complete and accurate. Honesty and integrity are of the utmost importance!

There are a few ways we will approach collecting our data:

1. Internet Searches
2. Telephone Interviews
3. In Person Interviews



In most cases, your collection efforts will be comprised of a combination of the above methods. For example, data collected from an Internet search must ALWAYS be followed up with a telephone interview or an in person interview – mostly because information changes pretty rapidly. It is important for our information to be current. What are some examples of how information might change? We will talk more about each of the data collection methods in a few minutes.



Let's talk for a minute about what information we want to collect. Open up the YOUTHTHRIVETemplate.xlsx that was emailed to you this morning. If you did not receive it, I have it available on a flash drive for you to open on your laptop now.

ArcGIS Online

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Each of the columns on our spreadsheet represents the information we want to collect:

- Service Provider Name -
- Service Category -
- Physical Address -
- Telephone Number -
- Provider Website -
- Ages Served -
- Fee Description -
- Days Open -
- Hours Open -
- Eligibility Requirements -
- Latitude -
- Longitude -

Service Categories: Education, Recreation, Personal & Workforce Development, Health, Religious, and Other.

Days Open should be listed with the following:

- Sunday – Su
- Monday – M
- Tuesday – T
- Wednesday – W
- Thursday – H
- Friday – F
- Saturday – Sa

May 2012						
SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY

Data Collection: Methods & Integrity

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Much of the information that we need will likely be available on the service provider's website if they have one. If information is not available on the website, you will likely be able to fill in the missing information with a phone call or a visit. Phone calls are an affordable way to get directly in contact with the service provider. Do not get

frustrated if you are not successful in connecting with the first call. Try a few times and be sure to leave a message if you get a voice mail. If you have an opportunity to leave a message or if you are able to



connect on a phone call, be sure to speak slowly and clearly. Here is a sample script for a telephone interview:

“Good afternoon. My name is (say your first name), and I am working on a project to collect information on the youth service providers in Wake County. I have viewed your website to gather most of the information I need, but I wanted to take a moment to verify your information. I will only need a few minutes of your time. Is now a good time to talk?

(If they say, “yes”) Great! Your website says your physical address is (read back the physical address you have from the website). Is that correct? (Continue in the same manner for each of the fields in the spreadsheet).” After you collect all the information say, “Thank you for your time. Have a great afternoon.”

(If they say, “no”) “Ok. When is a better time to talk?” At this point, you will want to find a realistic time that you could call them back. Do not agree to a time that you will not be available. For example, if they say to call back at 8:10

Data Collection: Methods & Integrity

GIS MAPPING INITIATIVE

on Wednesday morning when you know you are in pre-calculus, do not agree to that time.

In some cases you will not be able to connect with someone on the telephone and you will need to plan a visit to the location to gather the information. This may also be the case if you are not sure of the name of a location or cannot find information on the internet. For these situations, you will conduct an in person interview. In person interviews should ALWAYS be conducted as a team of at least one youth and one adult. Be sure to dress neatly and be professionally when you conduct an in person interview. Your script will be much the same as on the telephone interview. Begin by introducing yourself and explaining briefly about our project. Then proceed to verify information and fill in missing information.



Data you gather on site can be collected with pencil and paper. You may prefer enter data collected by phone call or internet search directly into the spreadsheet. Remember to save your spreadsheet often. You should also keep a

back up copy of the information somewhere safe just in case.

Let's do a practice scenario now. Conduct a Google search on a youth service provider in your community. Fill in any relevant information from the website directly into your spreadsheet. Role play with your team members to conduct an in person interview to verify and collect the rest of the information.

How did it go? Any questions about collecting the data?

Data Collection: Methods & Integrity

At this point in the process the hard work is completed. Now we will focus on making our information “map ready.” The first part of this process includes turning physical addresses into geographic coordinates, i.e. latitude and longitude. In order to do that we are going to utilize a process called geocoding. There are lots of options for free geocoding. For our project we will use GPS Visualizer’s batch geocoder located at <http://www.gpsvisualizer.com/geocoder>. To begin the process, we will need to carefully examine our data. Addresses should be entered as follows: Street Address (no apartment or suite numbers should be included), City, State. You will want to take the time to make sure that all addresses are entered correctly. There should be no apartment numbers or suite numbers included in the address. The city must be accurate. You must put NC for all of our providers. Once you have carefully examined your information for accuracy, you will select ALL of your address cells and copy them. You will paste the addresses directly into the “Input:” box on GPS Visualizer:

After you check your addresses for proper formatting and accuracy, highlight and copy the entire set of addresses. Paste the addresses directly into the “Input:” box on GPS Visualizer.



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Next you will simply press the light green “Start geocoding” button just below the “Input:” box:

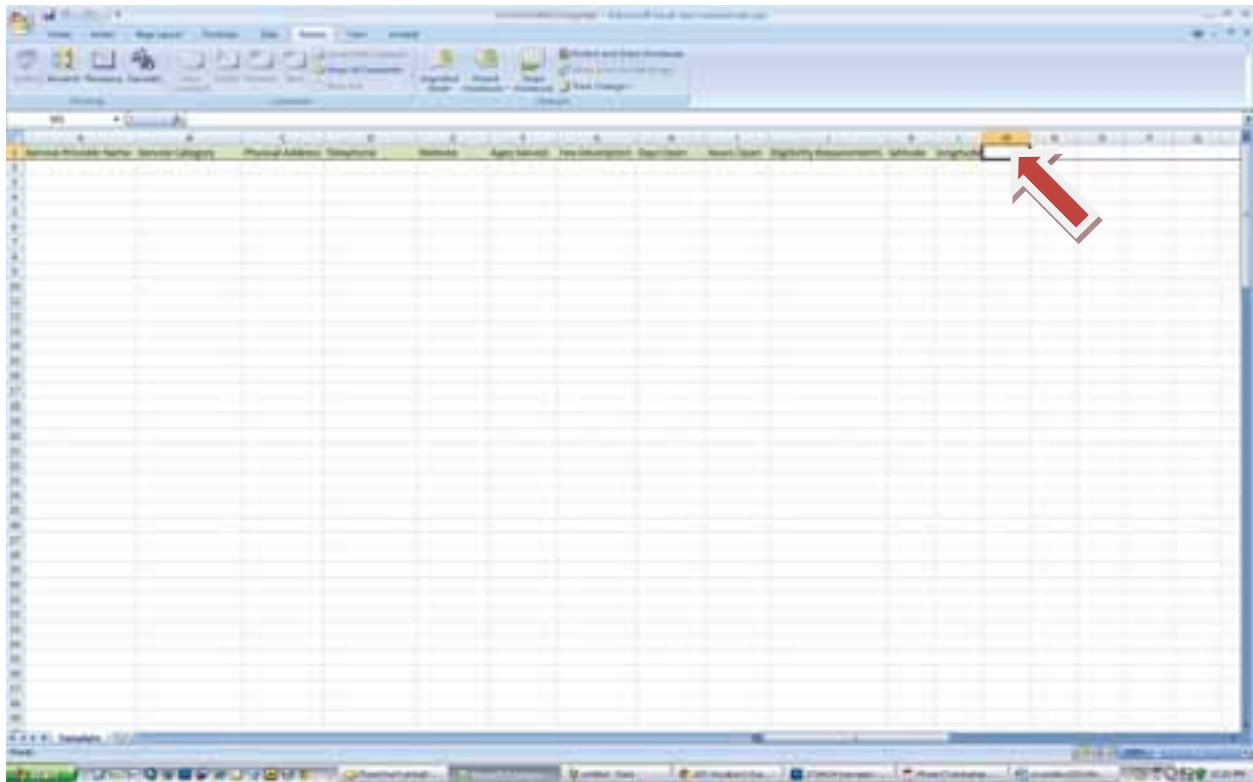


GPS Visualizer will begin converting your addresses into GPS coordinates. The results will show up in the “Results as text:” box below the map and icons will appear on the “Map of your locations:”. Watch carefully on the map to ensure that all the locations of the icons are in your assigned area. If any of the icons show up somewhere other than your assigned area you have likely made a data entry error on the address for that location. Wait patiently until all of your addresses have been “geocoded.”

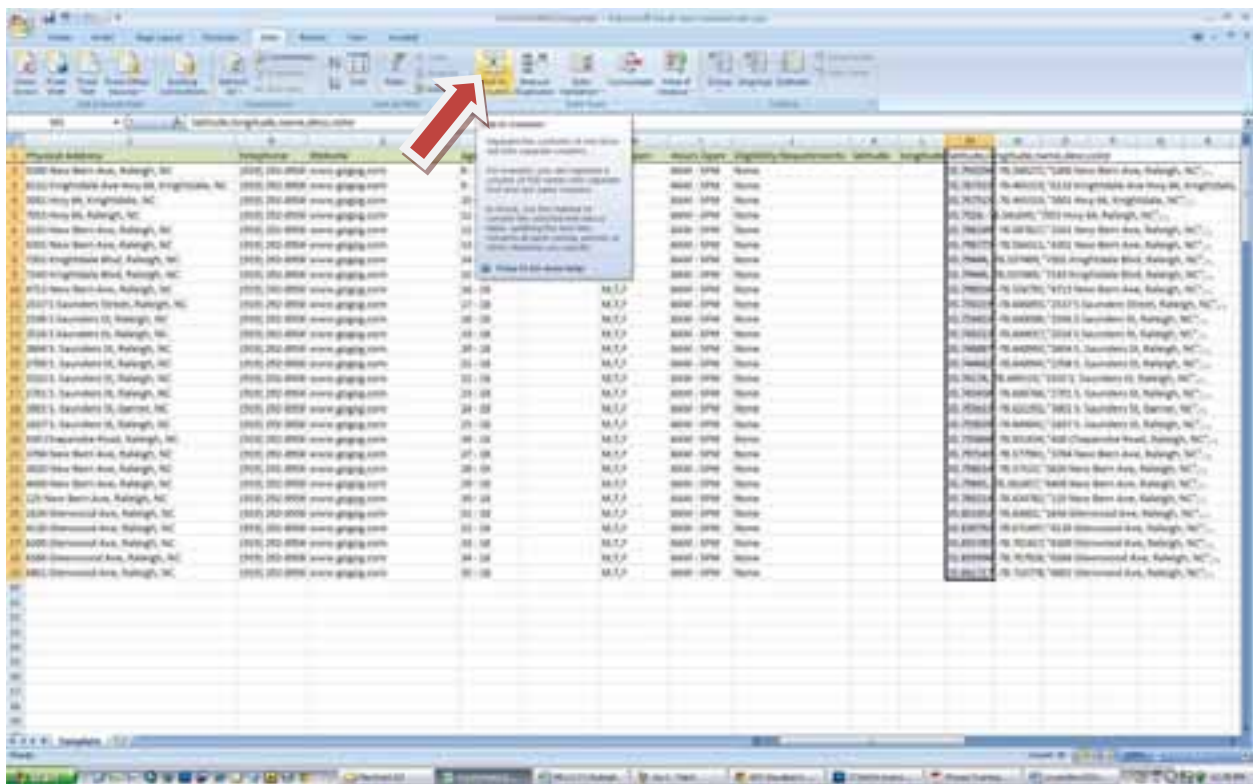
Now you will carefully select all text from the “Results as text:” box on the GPS Visualizer web page and copy it. Return to your YOUTHTHRIVETemplate.xlsx and select cell M1. Right click and paste into cell M1.

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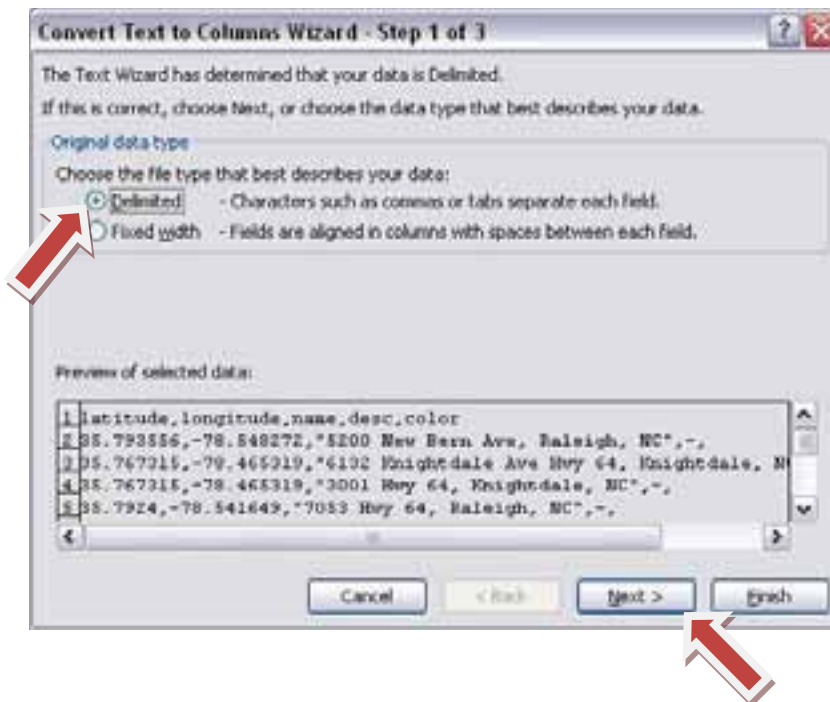
Next, select the “Data” tab at the top of Microsoft Excel and click “Text to Columns”



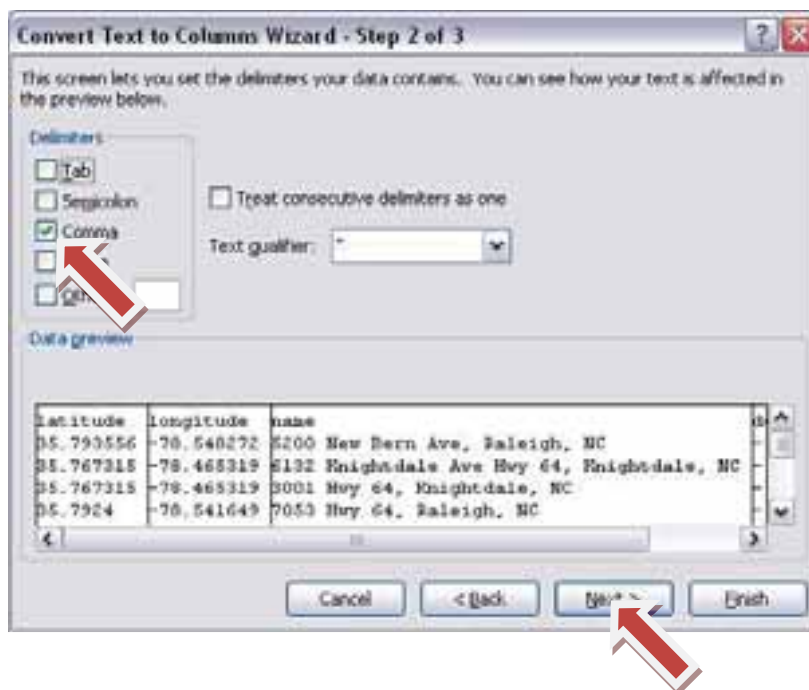
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On the first screen of the Convert Text to Columns Wizard, under “original data type” choose “Delimited” and “Next.”



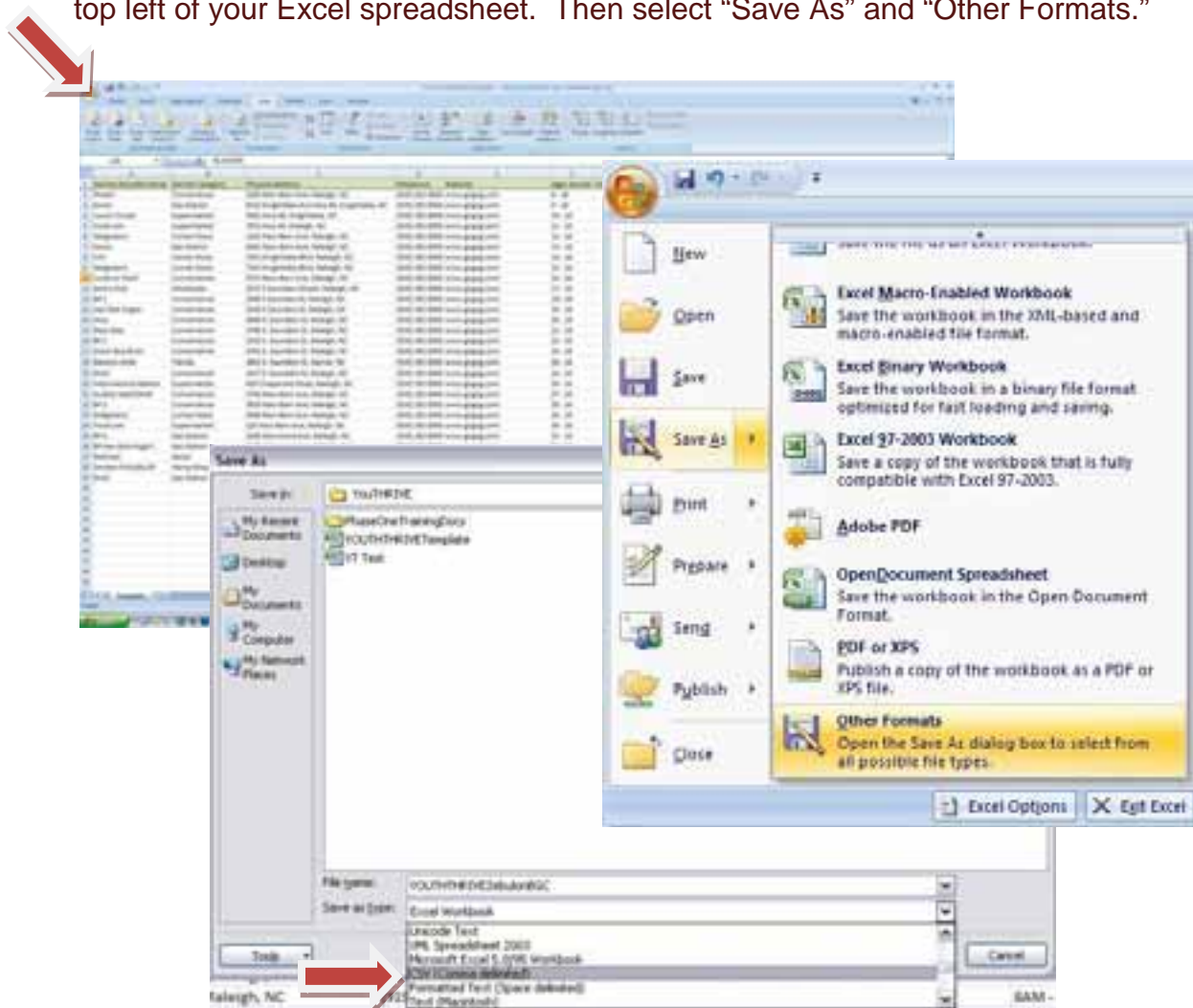
On the next screen of the Convert Text to Columns Wizard, in the “Delimiters” box, check “Comma.” Then press “Next.” And then “Finish.”



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Select all the cells that contain a latitude or longitude (M2, N2 and below). Copy and paste into K2. The values should automatically fill in columns K and L with the appropriate latitude and longitude.

Click the M on column M. Press and hold the Ctrl key while clicking on column N, O, P and Q. Once all of those columns are highlighted, right click and select “Delete.” Now you are ready to finish preparing your data for the map. Click the windows icon at the top left of your Excel spreadsheet. Then select “Save As” and “Other Formats.”



Then rename your spreadsheet to YOUTHTHRIVEClubName and select CSV (Comma delimited) as your file type. Save the file in your designated folder and save a back up.

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Select “Yes” at all prompts. You have now successfully saved your data as a .csv or “Comma Separated Value” file. This is important because the file needs to be .csv for use in our shared map.

Now open your web browser and navigate to <http://www.arcgis.com>. Click on the “Sign In” at the top right of your screen.



For our project, our Username is youththrive and our Password is Wake123.

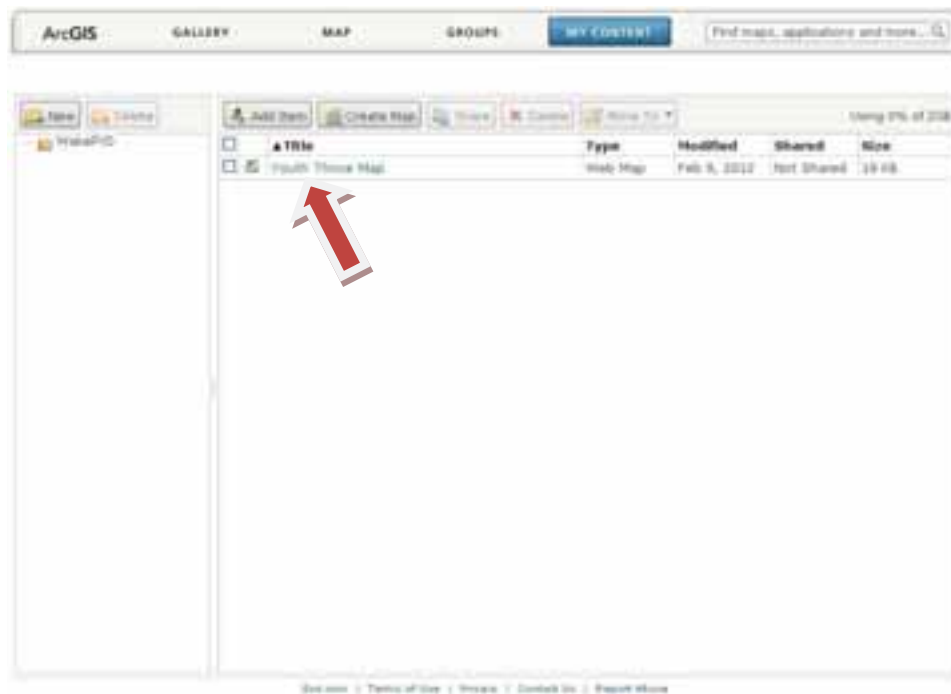
For our practice today, our Username is WakePYD and our Password is Wake123.

Go ahead and enter the practice Username and Password and select Sign In.

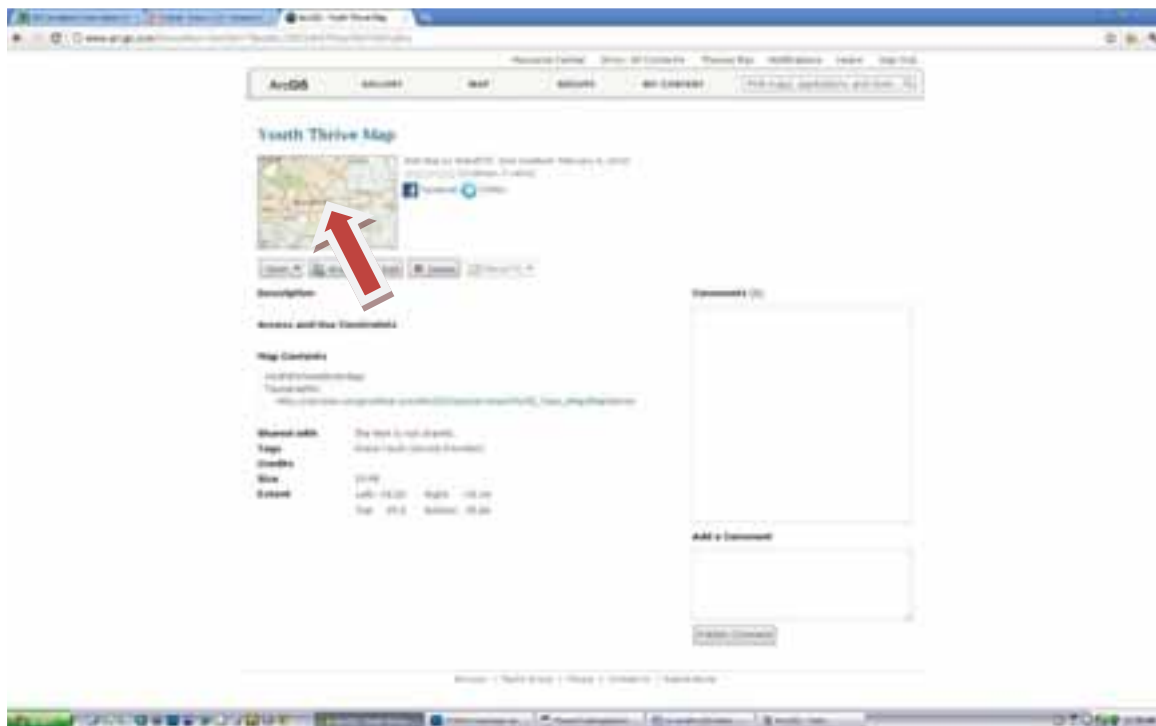
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Click on “Youth Thrive Map.” This is our shared project map. It should be the ONLY map you ever select in our shared account.



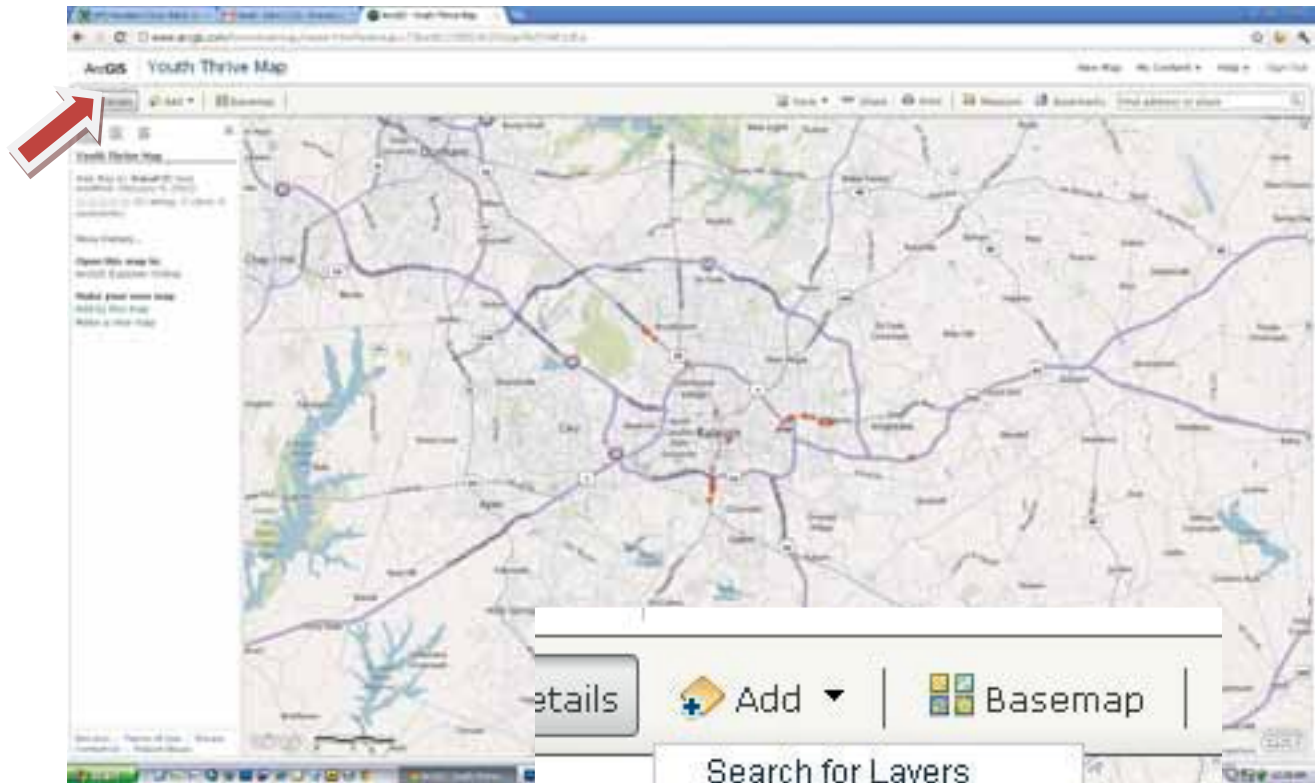
Now double-click on the picture of our map.



Click on the “Add” button near the top left of your screen.

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Select "Add Layer from File".



In the dialogue box, select "Choose File".
Navigate to your file and select it (make sure you get your .csv file). Click "Import Layer".

Your points will populate the map. When you select any of the points, the information you placed in your spreadsheet will be associated with your point. Congratulations!
Now it is important for you to click "Save" at the top center of the map. Choose "save" in the drop down selection.

ArcGIS Online

The only way this works is if EVERY team does their part. This is the time of the day when we will assign geographic regions to each team. Please note that your team



is responsible to map ALL of the youth service providers in your assigned region – no matter how few or how many. If you believe you will need assistance after you start your data collection, please let your technical assistance provider know early

on. He will work with our Youth Thrive team to provide additional support as necessary. Meet your technical assistance providers Joel and Tony. They will be working with you

to keep you on track to complete your assignment within SIX (6) weeks from today.

Additionally, they will make themselves available to answer any questions you may have about your data collection, your data spreadsheet or ArcGIS.com. If you have a question they cannot answer on the spot,

they will find the answer for you right away. They will be visiting you at least two times over the next six weeks, so let them know your planned work schedule.

Now, take about 20 minutes in your group to visit the assignment map, find your area boundaries, seek clarification, and make your work plan for the next 6 weeks. Refer to the check list on the next page, and ensure completion of all tasks.



Finding Your Place