

Community Accomplishments Reporting System (CARS) Manual



# Urban and Community Forestry

## CARS MAP MANUAL

### **An IDNR Urban and Community Forestry Accomplishments Tool**

This mapping tool displays the Community Accomplishments Reporting System (CARS) data as reported annually by the Illinois Department of Natural Resources to the USDA Forest Service. This data shows the accomplishments of municipalities that have participated in various Urban and Community Forestry Programs throughout Illinois during the year. There are four criteria used in this system. Below are the criteria and their definitions as described in the USDA Forest Service CARS MANUAL.

#### **Professional Staff**

**Professional Forestry Staff** – see [Professional Staff](#).

#### **Professional Staff**

*Intent:* Professional staff members have education, training and experience in the fields of urban forestry, arboriculture, and/or horticulture. These requirements are intended to ensure that the person with the primary responsibility for program management has the training and experience to properly and professionally manage the urban forest resource and advance the community's U&CF program.

*Definition:* Individuals who have one or more of the following credentials, and who the community directly employs or retains through written agreement to advise and/or assist in the development or management of their urban and community forestry program: 1) a degree in urban forestry or a closely related field (e.g., forestry, horticulture, arboriculture, etc.), and/or; 2) International Society of Arboriculture Certified Arborist (ISA) or equivalent professional certification. For example:

- a) The city arborist or city urban forester who is employed full- or part-time and responsible for the planting, protection and maintenance of a city's trees and forests.
- b) A public works or parks employee who is an ISA Certified Arborist and who supervises the town's tree crews responsible for the pruning, maintenance and removal of public trees.
- c) A credentialed, locally-based resource professional that provides urban forestry and arboricultural consultation services throughout the year to the community through a written Memorandum of Understanding. (Note: State U&CF program staff who provide advice to communities does not meet the intent of this section.)
- d) Any person that is an ISA Certified Arborist, American Society of Consulting Arborists Registered Arborist or equivalent that is retained to provide urban forestry and arboricultural consultation services by a city or town through a written agreement.

## **Advocacy or Advisory Organization**

### **Advocacy/Advisory Organization**

*Intent:* Many local U&CF programs began through the efforts of local citizen's groups, and these groups often serve as a catalyst to encourage active local urban forest resource management for the long term. This measure aims to ensure that community residents and program stakeholders are informed, educated, and engaged in the development and implementation of a sound community forestry program at the local level.

*Definition:* Organizations that are formalized or chartered to advise (organizations established by the local government) or advocate or act (non-governmental organizations active in the community) for the planting, protection and maintenance of urban and community trees and forests. For example:

- a) A board of citizens appointed by local elected officials to advise policy makers on needed tree ordinances, policies, and management.
- b) A voluntary citizens group such as "City ReLeaf" that is active in advocating for tree planting, preservation and management in communities.

## **Management Plan based on a tree inventory**

### **Management Plans**

*Intent:* Possessing, using and periodically updating a management plan demonstrates a community's commitment to the comprehensive management of its community tree and forest resources.

*Definition:* A detailed document or set of documents, developed from professionally-based [inventories/resource assessments](#) that outlines the future management of the community's trees and forests. The plan must be **active** (i.e., in use by the community and updated as needed to incorporate new information). Examples include:

- a) An "Urban Forest Master Plan," based on satellite imagery/GIS or other inventories and assessments, that sets goals for tree canopy cover, recommends areas for reforestation, recommends areas for preservation, promotes community education and outreach efforts, and recommends tree maintenance policies for town/city/county properties.
- b) A "Public Tree Planting and Maintenance Plan" based on an inventory of trees and open spaces in street rights-of-way and parkland. These types of plans include information such as a prioritized list of tree pruning and removals, a prioritized list of replacement and new tree plantings, a recommended yearly budget, and a recommended list of tree species for replanting.
- c) A community's Comprehensive Land Use plan that incorporates specific management recommendations for the community's trees and forest resources.

A hazard tree reduction and replanting plan based on an inventory of community trees.

### ***Management Plan Terms***

***Inventories and Resource Assessments:*** A document, set of documents, or database containing specific, standardized information recorded on a number of individual trees or groups of trees in an identified area of the community. May also contain information on other natural features and the built environment needed for management planning. For example:

- a) Individual data recorded on each tree in community neighborhoods, for example a unique tree number, DBH, height, branch spread, condition rating, hazard rating, etc.
- b) A study based on remotely-sensed data (GIS, aerial photography, etc.) that documents community tree cover and identifies current vegetative cover types and land uses. The study may include an analysis of the change in tree cover over time.
- c) Inventories conducted by in-house professional staff, trained volunteers, a consulting arborist, or any combination of these. This includes statistically-based sample inventories that do not require inspection of all trees in all cases, but still allows for the management of the community forest resource in a manner intended to improve its condition and extent.
- d) An analysis using a standard survey or statistically-based sampling tool that quantifies the environmental services provided by a community's forest.
- e) An inventory of parkland trees. The inventory may also include the data in example (a) above, and additional information on invasive plant species impacting the health of individual trees and forest stands.

### **Tree Ordinance**

#### **Ordinances/Policies**

*Intent:* Ordinances and/or policies must be codified, be followed and/or routinely enforced by some mechanism within the community, and guide the community in the proper care, establishment and protection of community trees and forests. The definition and examples below recognize the fact that effective public policies are not always contained in a single "Tree Ordinance."

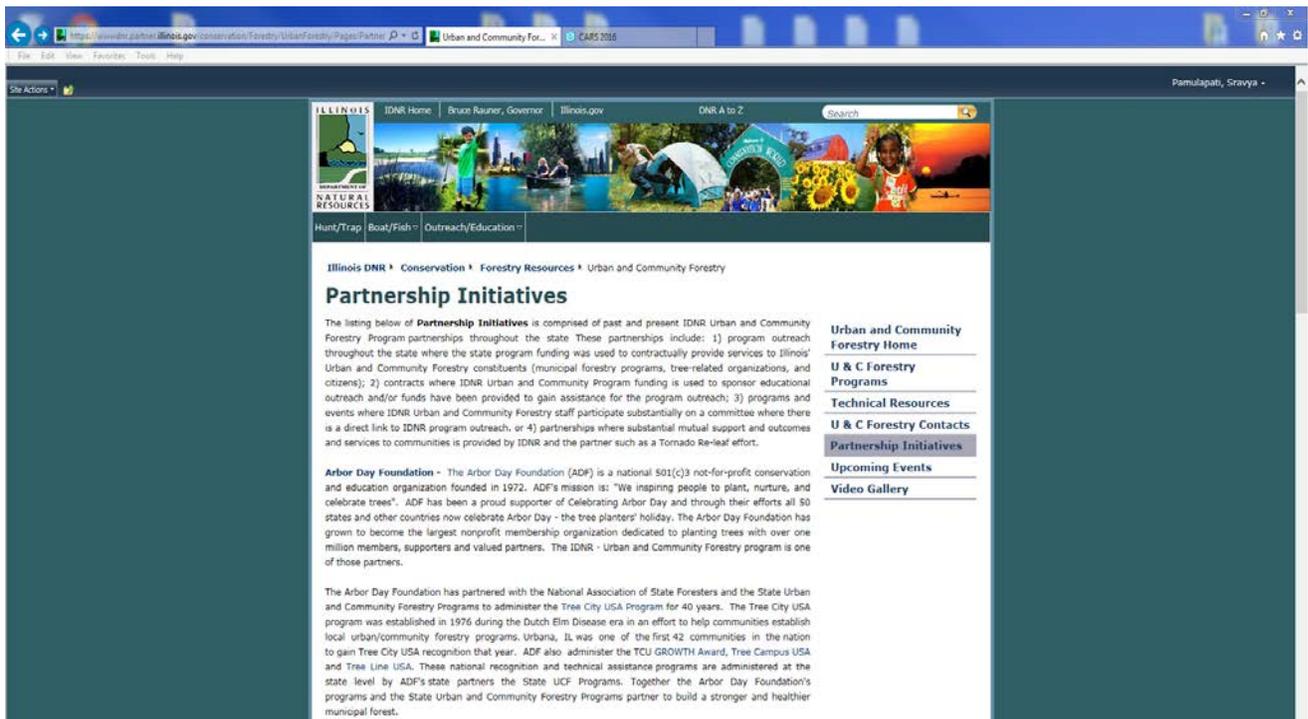
*Definition:* Statutes or regulations that direct citizens and local governments in the planting, protection and maintenance of urban and community trees and forests. For example:

- a) A town "Tree Ordinance" that dictates how trees are to be planted and maintained in the community and under what conditions trees can be removed. Depending on the jurisdiction, the ordinance may apply to just public trees, or public and private trees.

- b) A comprehensive set of community regulations and/or policies on tree preservation and landscaping that may include sections of the Zoning Ordinance, Code and Public Facilities Manual.
- c) City regulations that contain specific forest management requirements developed to be in compliance with a state “Watershed Protection Ordinance.” The regulations may establish tree and natural areas preservation, buffer requirements, reforestation and building restrictions for each watershed in the community.
- d) A local ordinance established under a state mandate that requires each local jurisdiction to adopt tree protection standards and employ a “Tree Warden,” or equivalent, with specific statutory responsibilities to oversee the planting, protection and maintenance of trees and forests in the community.

**Using THE CARS MAP TOOL**

- 1) **USE Chrome** and go to <https://www.dnr.illinois.gov/conservation/Forestry/UrbanForestry/Pages/PartnershipInitiatives.aspx>



## 2) Scroll down to the USDA FS partnership paragraph

### **USDA Forest Service Urban and Community Forestry**

The most critical partnership for Illinois Department of Natural Resources (IDNR) is the USDA Forest Service. Without this partnership, the State Urban and Community Forestry Program would not exist. The USDA Forest Service Urban and Community Forestry Program provides technical and financial assistance to governments, tribes, and non-profit groups for activities that maximize the many environmental, social and economic benefits of trees and forests in communities. Together the USDA Forest Service and the Illinois Department of Natural Resources works to build strong healthy resilient local forests.

Annually, the Illinois Department of Natural Resources reports community accomplishments to the USDA FS through a process called Community Accomplishment Reporting System (CARS). This system is used to report the progress within the state of local municipal programs by Illinois communities and local units of government. For greater transparency, IDNR has created a CARS MAP so that interested parties can see how their community's progress was reported. The state must assess four critical elements and criteria to a sustainable local program: professional staff, tree ordinance, management plan based on a tree inventory, and volunteer advocacy. There is a CARS MAP INSTRUCTION MANUAL provided on the search bar of the MAP to help interpret the CARS criteria and the MAP data. Simple searches by CARS criteria or community size are available with this tool. Contact information for questions about MAPS.

Other USDA Forest Service Initiatives include: [Urban Webinar series](#), [Urban Forest Strike Team](#), Urban Forest Inventory and Analysis.

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### 3) CLICK on the CARS hyperlink.

The ArcGIS home screen that comes up contains the 2016 CARS data as submitted to the USDA Forest Service in October, 2016. The base map shows all communities that were active in the IDNR programs, Tree City USA program or received technical assistance from IDNR Headquarters. Also listed are IDNR partners' accomplishments including, but not limited to, Municipalities that attended the Illinois Arborist Association Annual Conference and other educational events, participated in an educational training or workshop or received technical assistance from Morton Arboretum, Openlands or Trees Forever.

With the base map, you can zoom to a region or community level of the state using the zoom buttons. Program participants are shown using one of four icons. The icons range from an acorn to seedling to small tree to a mature tree depending on how many of the CARS criteria are met. Click on the icon to display the Communities Attribute table. Each community has the following data in its ATTRIBUTE TABLE:

- Community Name
- Population Size
- County

#### ICON KEY

ACORN – **Developing** Community with **One** CARS criteria  
SEEDLING – **Developing** Community with **Two** CARS criteria  
SMALL TREE – **Developing** Community with **Three** CARS criteria  
MATURE TREE – **MANAGING** community with all **Four** criteria.

Note: There will be a “Yes” response if the community met that CARS criteria below.

- **Professional Staff**
- **Advocacy/Advisory Organization**
- **Management Plans based on a tree inventory**
- **Tree Ordinances/Policies** **SEE EXAMPLE OF SCREEN SHOT ON P17**

#### **DEFINITIONS:**

**Developing Programs** – have between one and three of the following: 1. Active urban & community tree and forest management plans developed from professionally-based resource assessments/inventories; 2. employ or retain through written agreement the services of professional forestry staff; 3. local/statewide ordinance or policies that focus on planting, protecting, and maintaining their urban and community trees and forests; or 4. Local advocacy/advisory organizations, such as, active tree boards, commissions, or non-profit organizations that are formalized or chartered to advise and/or advocate for the planting, protection, and maintenance of urban and community trees and forests.

**Managing Programs** – have active urban & community tree and forest management plans developed from professionally-based resource assessments/inventories; employ or retain through written agreement the services of professional forestry staff; adopted local/statewide ordinances or policies that focus on planting, protecting, and maintaining their urban and community trees and forests; and have local advocacy/advisory organizations, such as, active tree boards, commissions, or non-profit organizations that are formalized or chartered to advise and/or advocate for the planting, protection, and maintenance of urban and community trees and forests.

- 4) There are several search queries that have been created for your viewing. Click on the criteria that best meets your search needs
- 

Search by each CARS criteria:

- 1) [TREE ORDINANCE](#)
- 2) [MANAGEMENT PLAN](#)
- 3) [STAFF](#)
- 4) [VOLUNTEER ADVOCACY](#)

The communities will want to search by community size:

- 1) [Population](#)
  - a. [Less than 5,000](#)
  - b. [Range between 5001 - 25,000](#)
  - c. [Range between 25,001 – 75,000](#)
  - d. [Greater than 75,000](#)
- 2) [Tree Ordinance](#)
- 3) [Population and Tree Ordinance](#)
- 4) [Management Plan](#)
- 5) [Population and Management Plan](#)

Our Partners may want to search by:

- 1) [County](#)
  - 2) [County and Tree Ordinance](#)
  - 3) [County and Management Plan](#)
  - 4) [County and Volunteer Advocacy](#)
  - 5) [County and Staff](#)
-

## NOTES:

You can set a bookmark for the site by clicking the star  in the upper right corner of your screen, type a name for the location that makes sense to you, then click done. Always use this bookmark and it will be quicker and easier to get to the site.

**Instructions Manual from the next page**

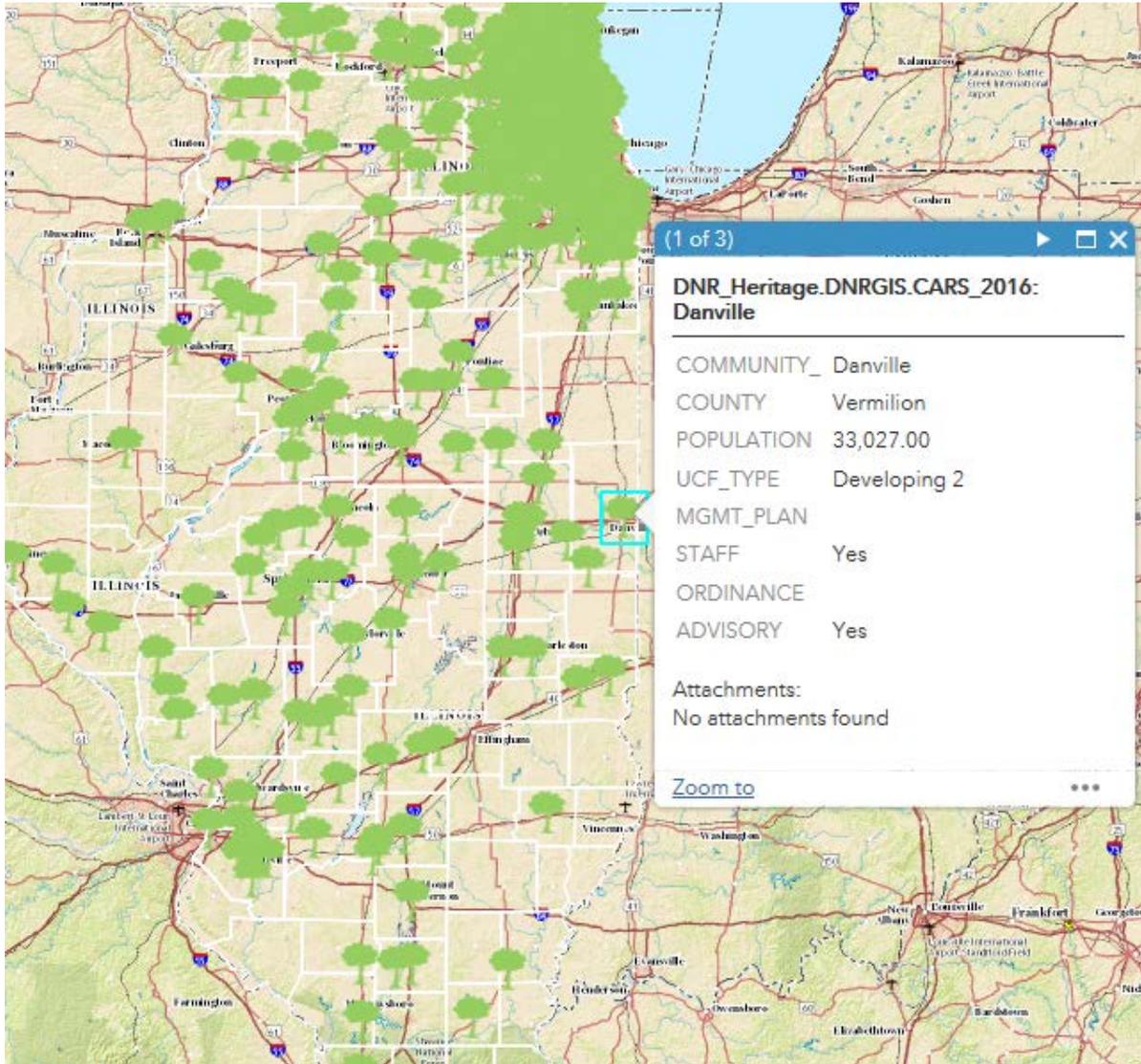
## CARS MAP MANUAL

The Outlook of the map is:



The small tree  symbols showing on the MAP represent Illinois Community Accomplishments Reporting System (CARS) data. This data includes communities, counties, population size and the CARS standards that they have achieved.

By clicking on a particular tree symbol button. That community's information appears in a dialog box as shown in the picture below.



Also note that you can see all the communities present in that county from the dialog box.

Click on the bullet [  ] button which is at the top right of the dialog box.

The top left of the dialog box will show (1 of 3). Which means there are 3 communities in that particular county.

For easy understanding and for visual interest we have built this map using **four** different types of tree symbols. The symbols depict the communities' commitment for meeting the CARS standards, showing whether the communities have met one standard, two standards, three standards or all the four standards.

There are **four** CARS criteria:

1. **Tree Ordinance**
2. **Management Plan**
3. **Professional Staff**
4. **Volunteer Advocacy**

If the community meets any **one** of the above standards, then that community is labeled with:



If the community meets any **two** of the above standards, then that community is labeled with:



If the community meets any **three** of the above standards, then that community is labeled with:



If the community meets all the **four** of the above standards, then that community is labeled with:



The above symbols can be seen on the map, when we zoom into the communities.

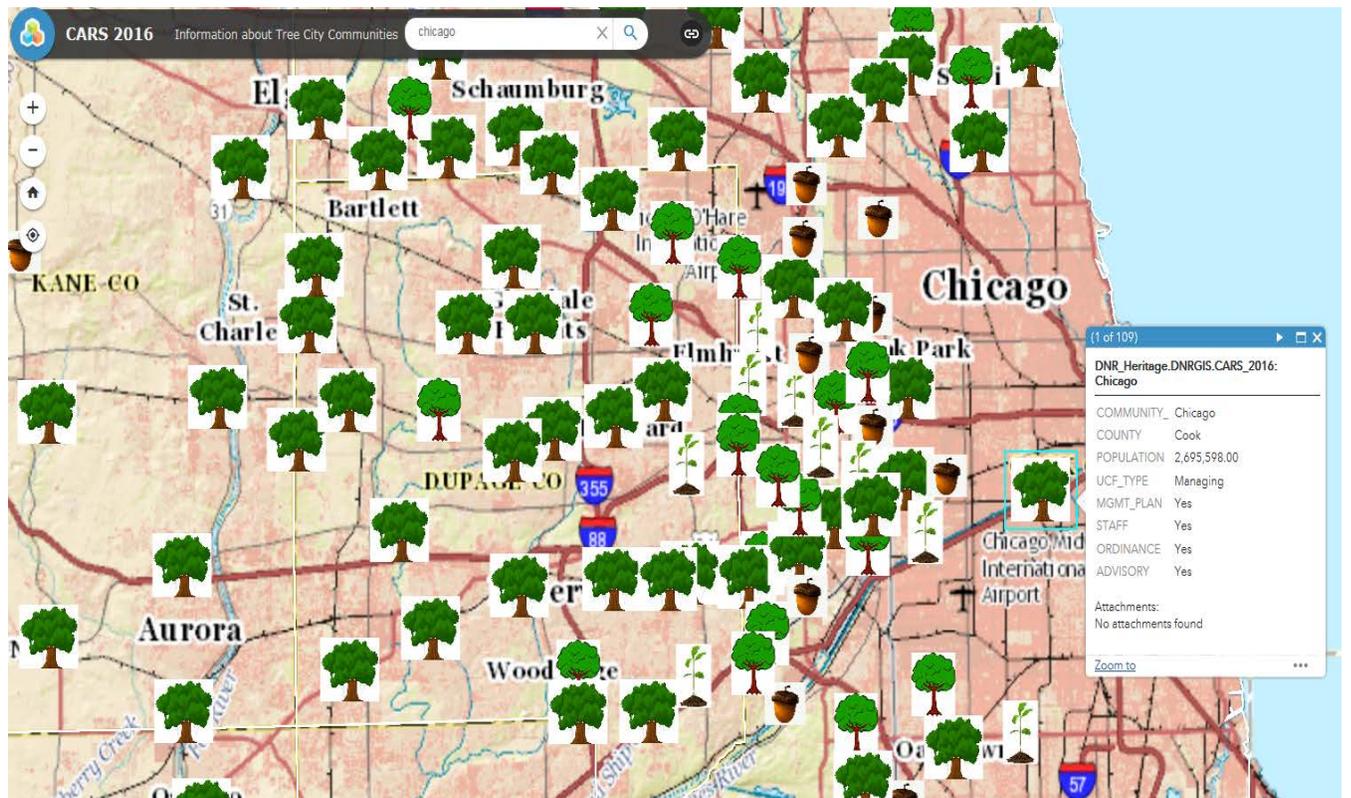
To the top most left on the map, you can find a “Search box”. (Pictured below)



As you can see there is a search button [  ], Enter the name of the community you want to search in the space provided (as in the picture) and click on the search symbol button.

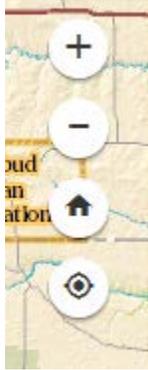
Example: Chicago.

Then you can see that, it is directly zoomed into Chicago region.



Next you just need to click on the  (tree symbol) in Chicago part. Then you get a pop up information box showing the Chicago community details.

Below are the Basic buttons that are used in Maps



The  (**Zoom In**) button is used to zoom the Map.

The  (**Zoom Out**) button is used to reduce the size of the Map.

 (**Home**) button is used to get back to the Map freshly, without any searches which you have done before (going back normal, as it is earlier).

 (**Location**) button is used to find the present location of yours on your mobile device.

(This option is only for mobile device users)

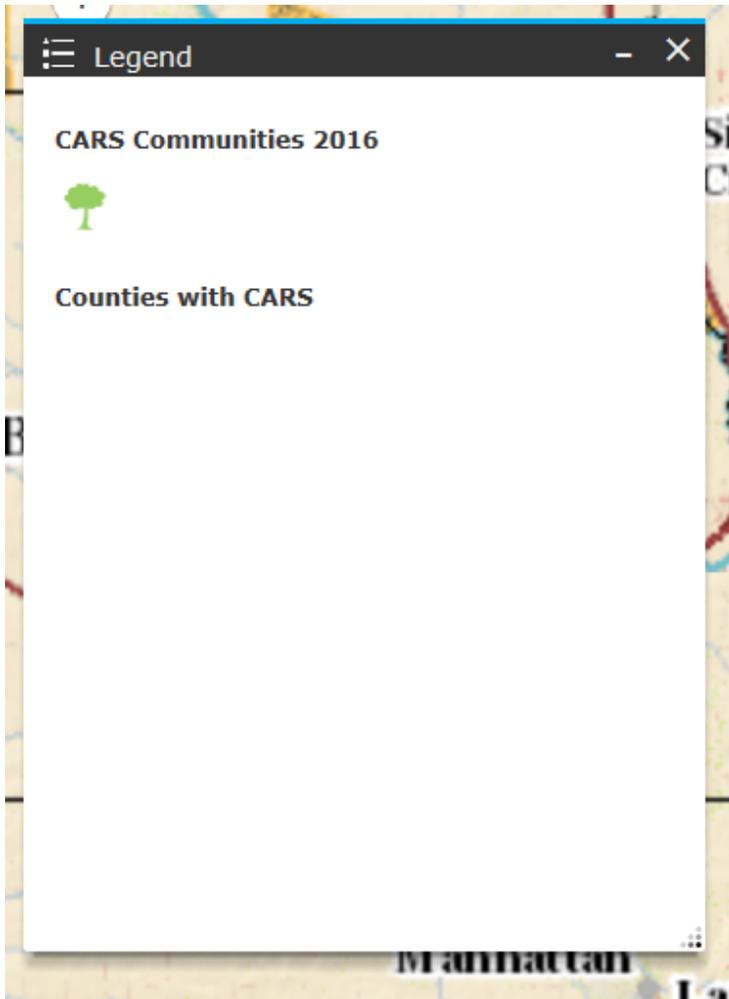
At the bottom middle of the map, you can find these helpful buttons for easy access of data in the MAP





This button is called as the **LEGEND** button.

By clicking on this button, a dialog box appears on the map showing the details or the contents of the Map. (This is for information only, no changes can be done inside this button)

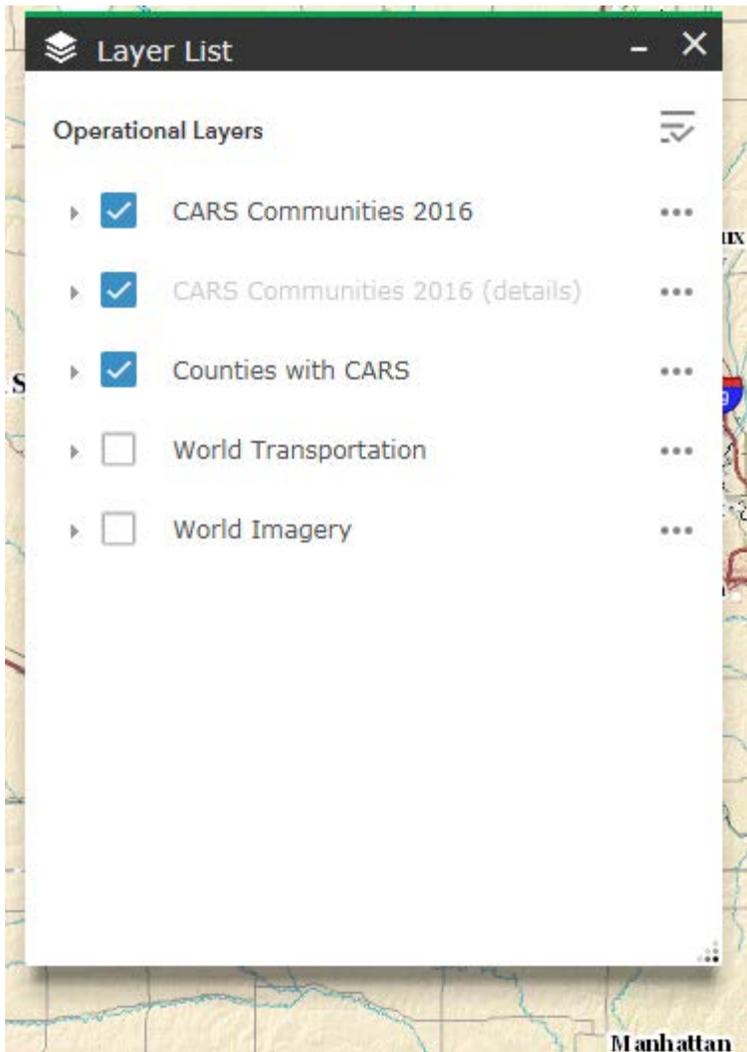




This button is called as **LAYER LIST** button.

By clicking this button, a dialog box appears that has all the [Operational layers](#) (These are [default layers](#) and can't be deleted), which are used in the map and has [checkboxes](#) to turn them on and off.

These are the default Operational layers.

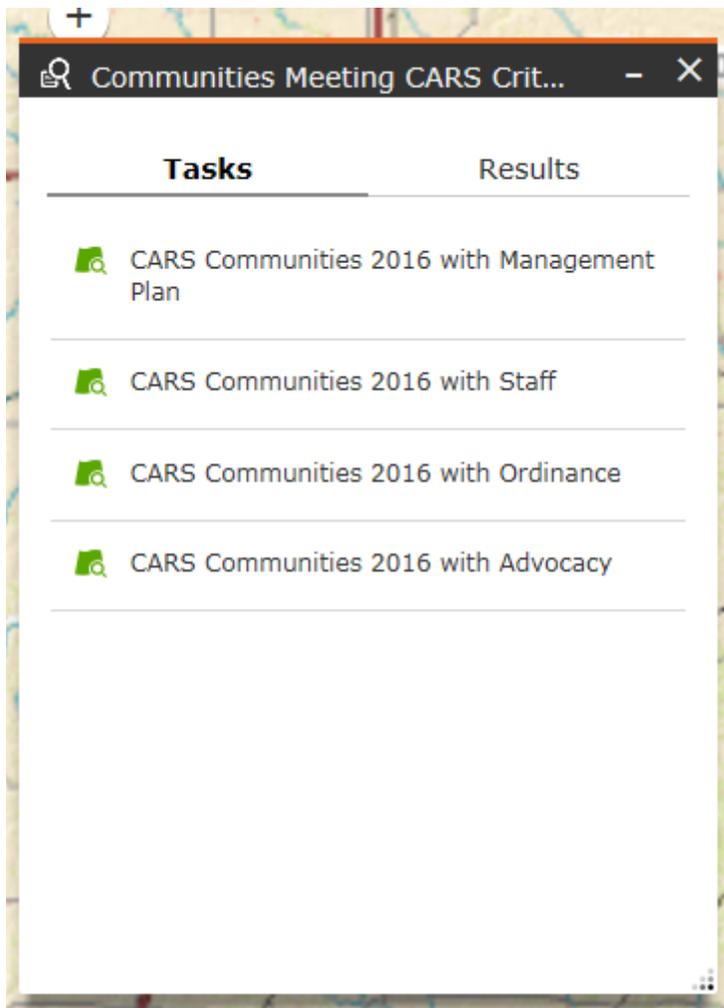


[World Transportation](#) and [World Imagery](#) are extra layers. These can be used upon special interest by the users. Their description can be found by clicking the three dots to their right and again click on "**Show Item Details**".



This button has attributes for “**Communities meeting CARS criteria**”.

By clicking this button, a dialog box appears with the four CARS criteria listed. Click on any criteria to see which communities qualify for this CARS criteria.

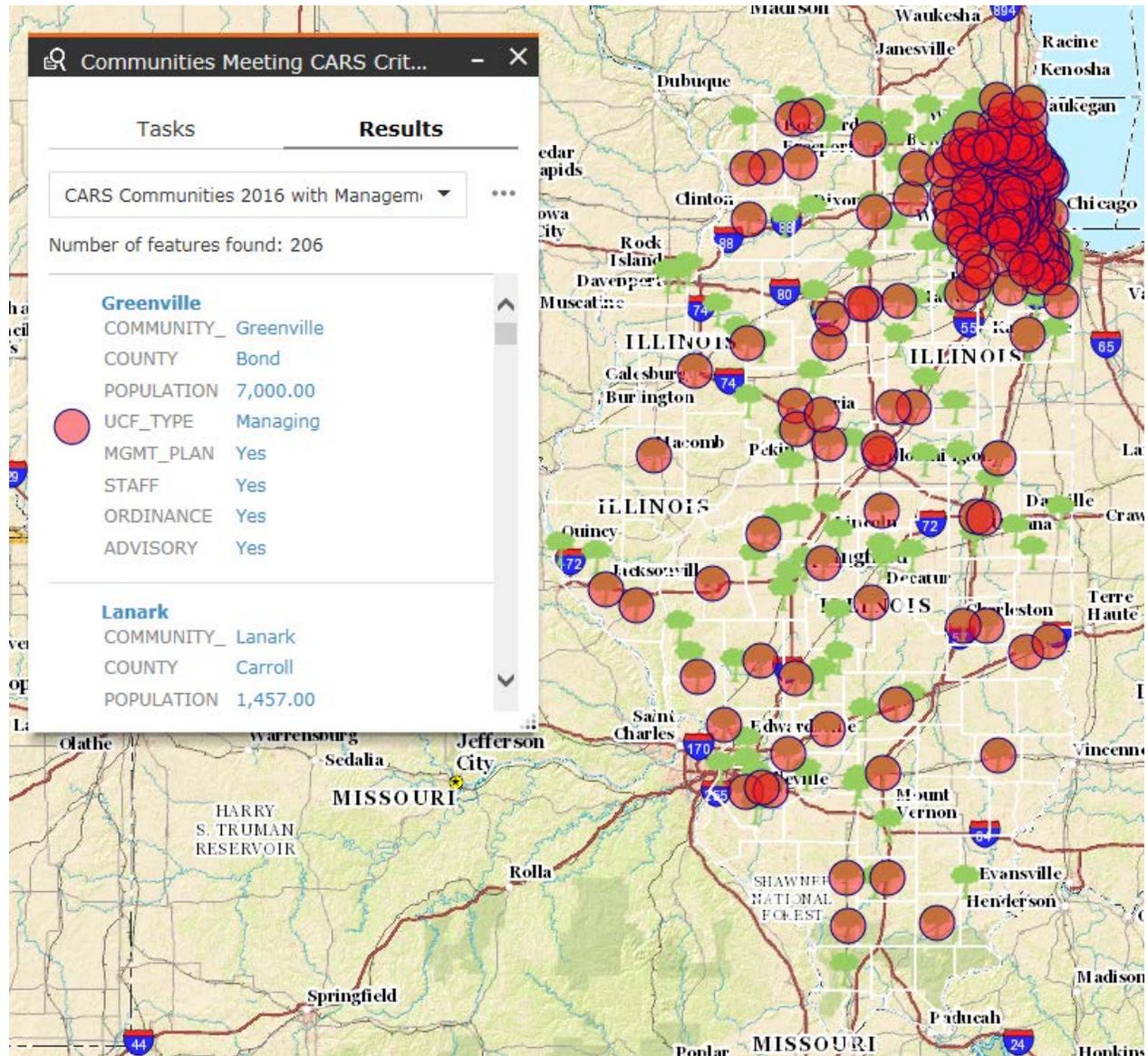


## For Example:

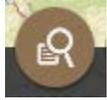
By clicking any inside task listed, “CARS communities 2016 with Management Plan”, we get the results of that particular task.

All the communities meeting the selected CARS criteria are listed in the dialog box and shown by **Red dots** on the map. These communities meet the CARS management plan criteria as show in the picture below.

Use Scroll bar to see the list.



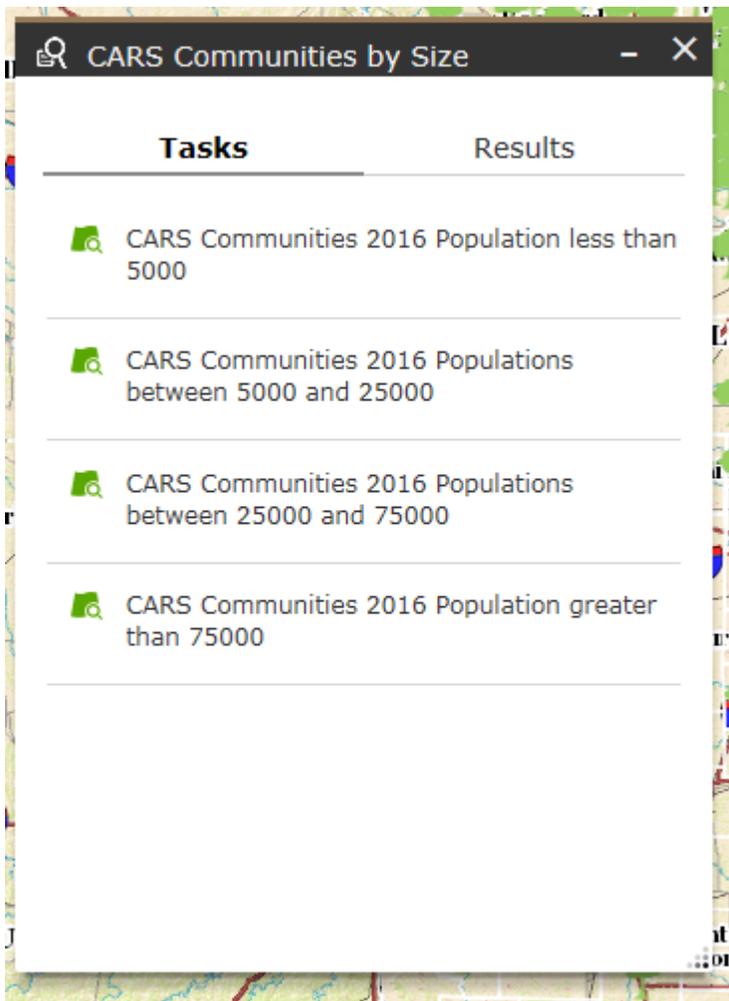
In the same manner you can get the results to all the queries (Tasks) listed in the above Dialog box of Communities meeting CARS criteria.



This button has attributes for “**CARS Communities by size**”.

By clicking this button, a dialog box appears that has communities with four different Population ranges.

This allows you to search by Community Population size.

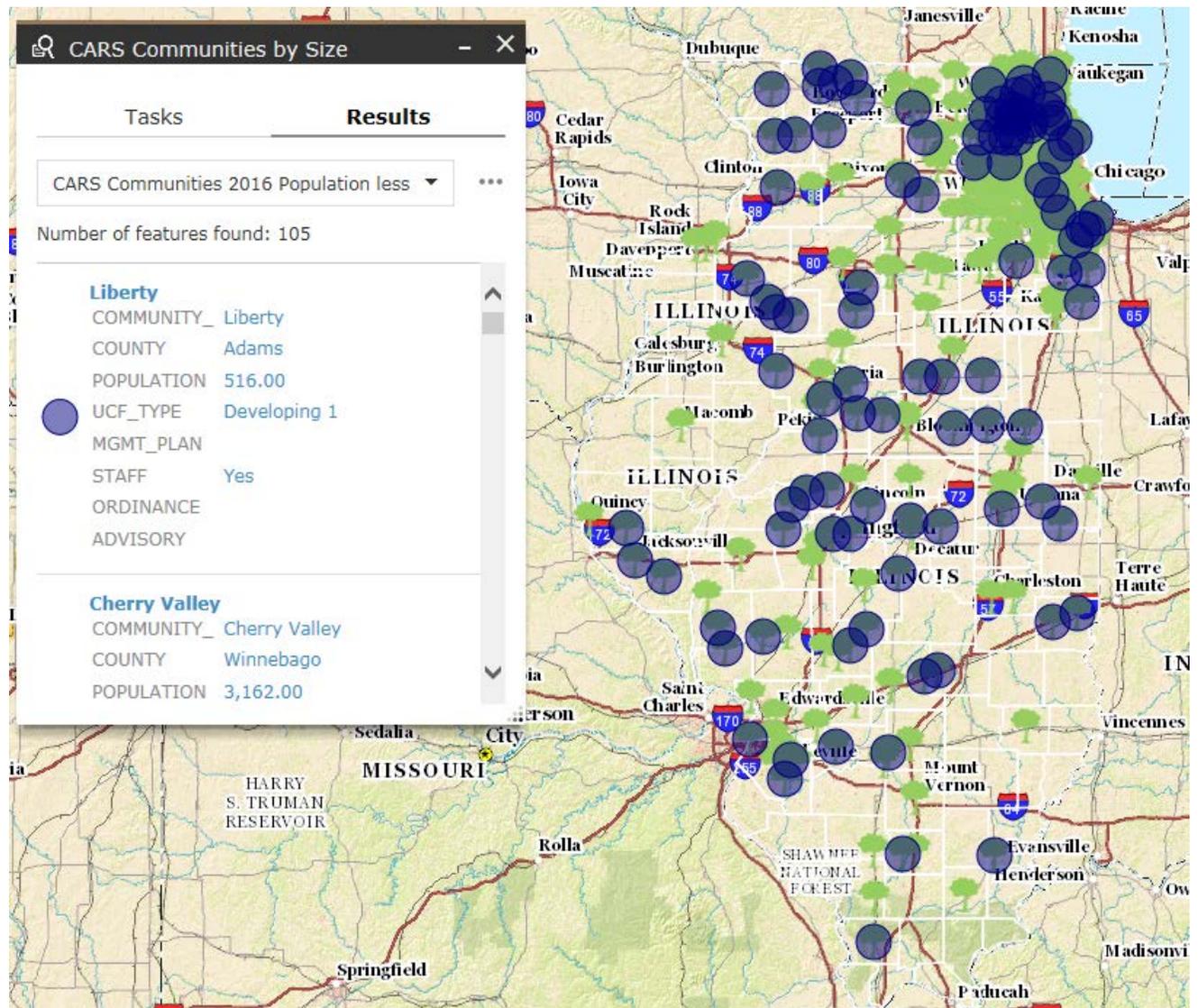


**For Example:**

By clicking any inside task listed “CARS communities 2016 population less than 5,000”, we get the results of that particular task.

All the communities meeting the selected criteria are listed in the dialog box and shown by violet dots on the map. These communities has population less than 5,000 as show in the picture below.

Use Scroll bar to see the list.



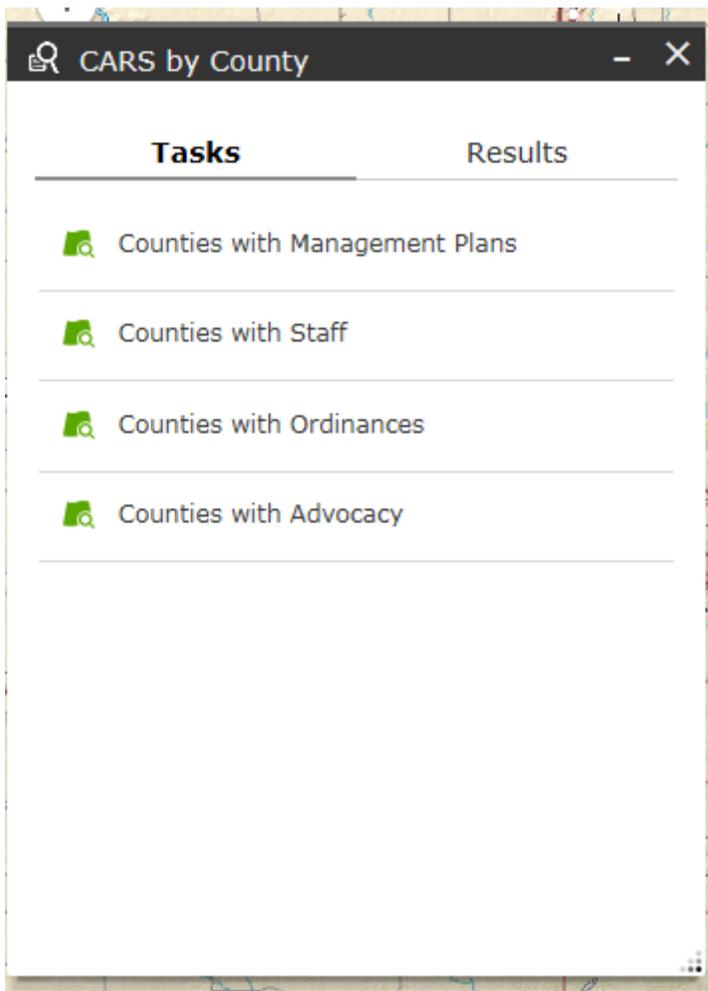
In the same manner you can get the results to all the queries (Tasks) listed in the above Dialog box of CARS Communities by Size.



This button has attributes for “**CARS by County**”.

By clicking this button, a dialog box appears that has Counties with four CARS criteria listed.

Click on any criteria to see which counties qualify for this CARS criteria.

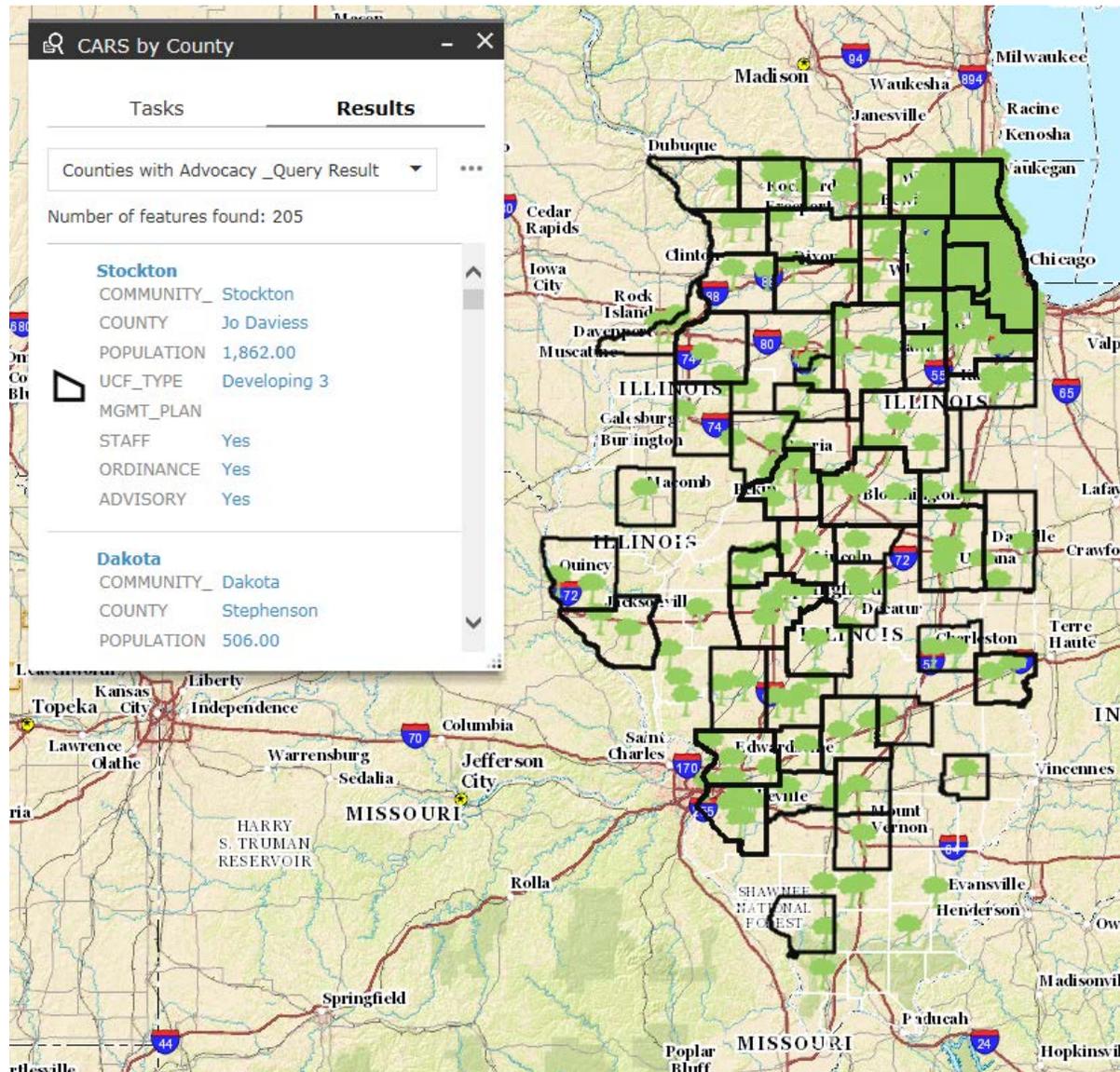


## For Example:

By clicking any inside task listed, “Counties with Advocacy”, we get the results of that particular task.

All the counties meeting the selected criteria are listed in the dialog box and shown by **thick black outlined boxes** on the map. These counties meet the CARS Advocacy criteria as show in the picture below.

Use Scroll bar to see the list.



In the same manner you can get the results to all the queries (Tasks) listed in the above Dialog box of CARS by COUNTY.

To start your search from the beginning, you can go back to Home button [] and click it.

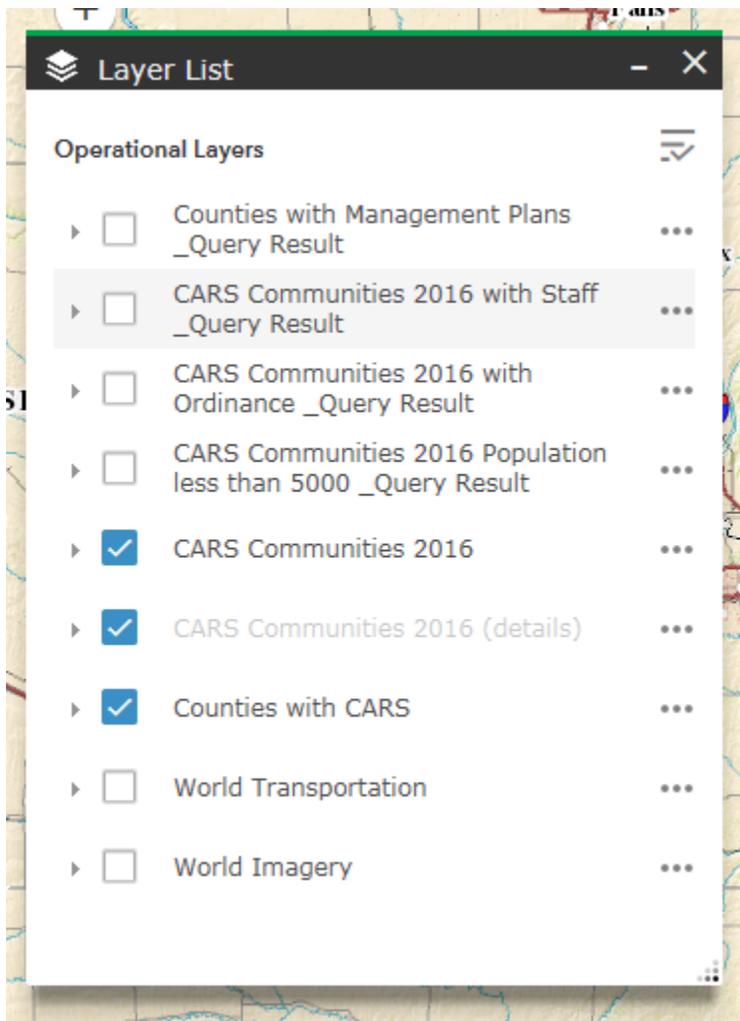
**Additional Information:**

When we start searching the different queries of CARS criteria for the communities in other

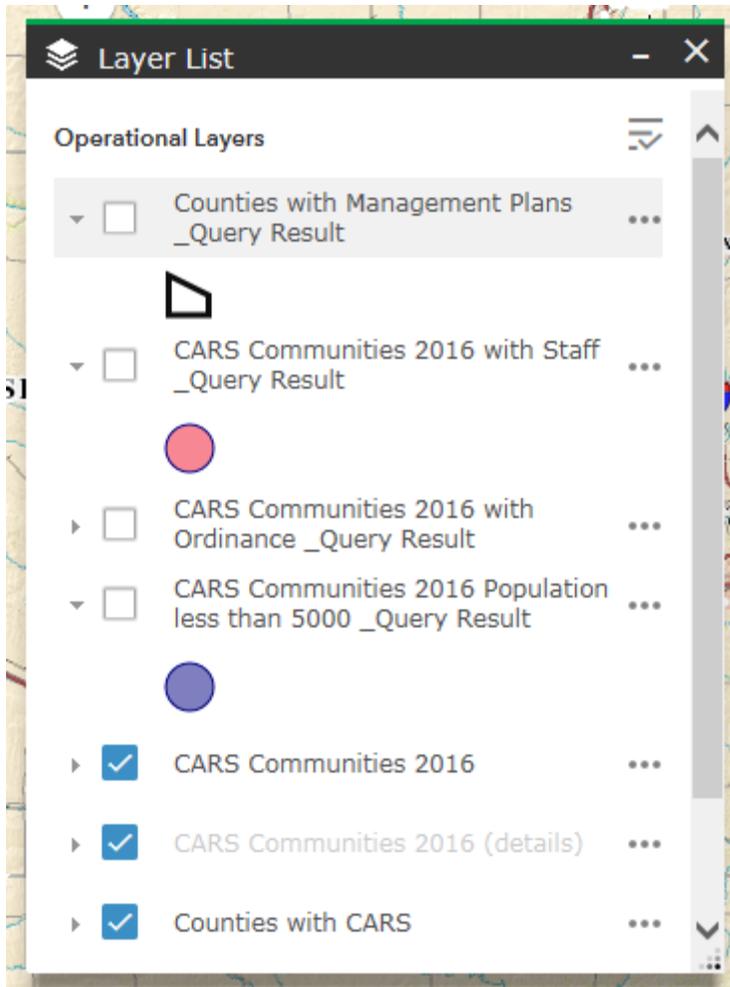
buttons, which are specifically built for them [like  Communities meeting CARS

criteria button,  Communities by Population size button and  CARS by County button] also enables the layers in the operational layers. Where you can see other layers (the queries that you searched) added to the operational layers in the Layers List button.

**Example:** This is the Layers list dialog box after searching the queries in other buttons.



Click on the right pointing arrow next to the layer name. It opens the symbol for the criteria and the arrow now points down as shown in picture below.

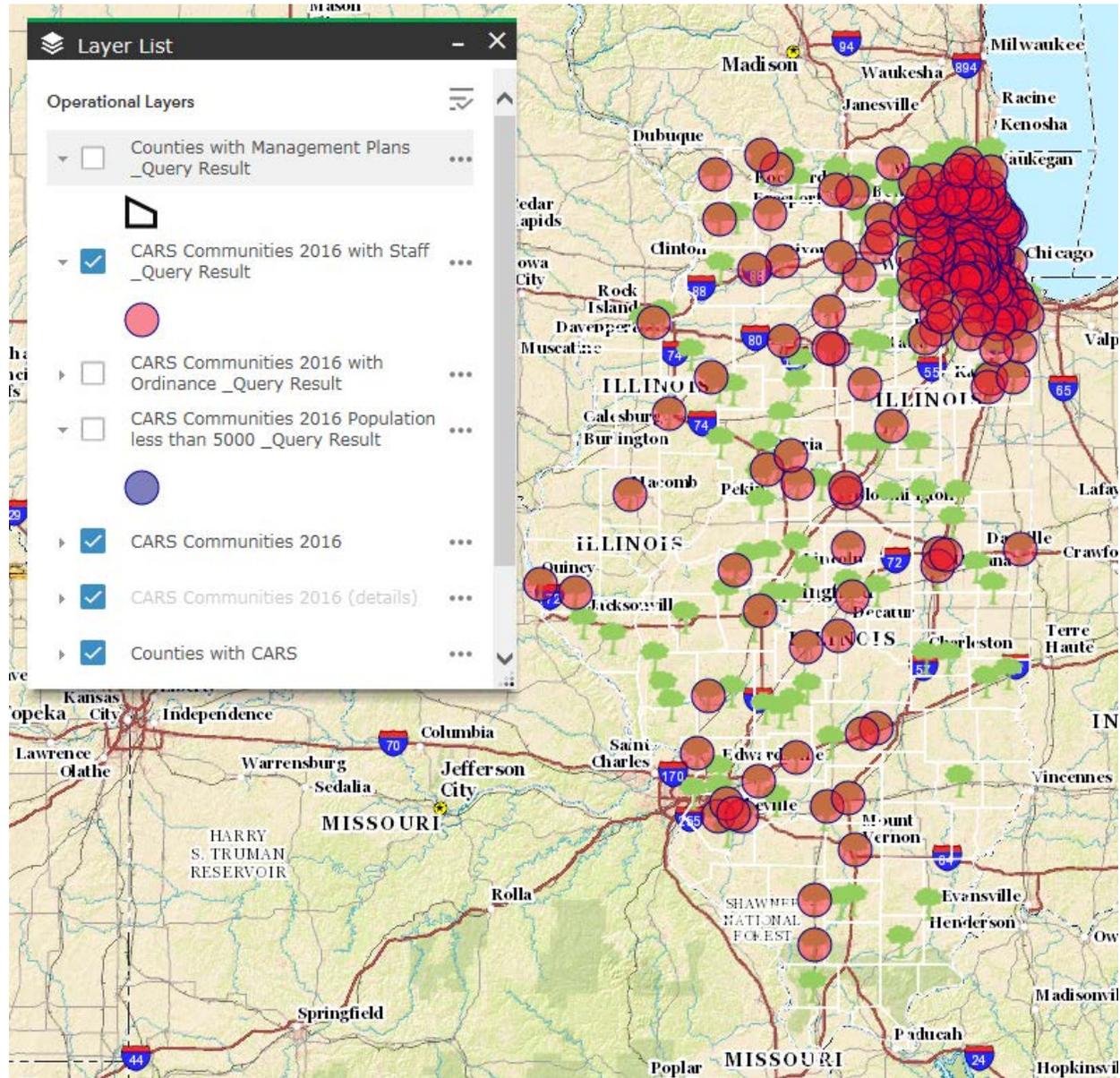


We can enable the query by clicking on the check box which will then reflect the symbol on the Map for qualifying communities. Clicking again on it disables the query and also removes the symbols from the Map.

Enabling the Check boxes Result as an example:

In the example, we enabled the query “CARS communities’ 2016with staff \_Query Result”.

As you can see there are **Red dots** on the Map showing all the communities that qualify the above query.



If you don't want the extra layers showing up on the layers list, you just need to refresh the MAP'S webpage.

**Or** delete layers using the instructions on the next page

## Deleting Query from Layers List:

**Note:** Default queries cannot be deleted.

If you want to delete a particular query or queries in the Layers list, go to the dialog box for the query you want to delete.

Look for the three dots on the right hand side of the query and click on those dots.

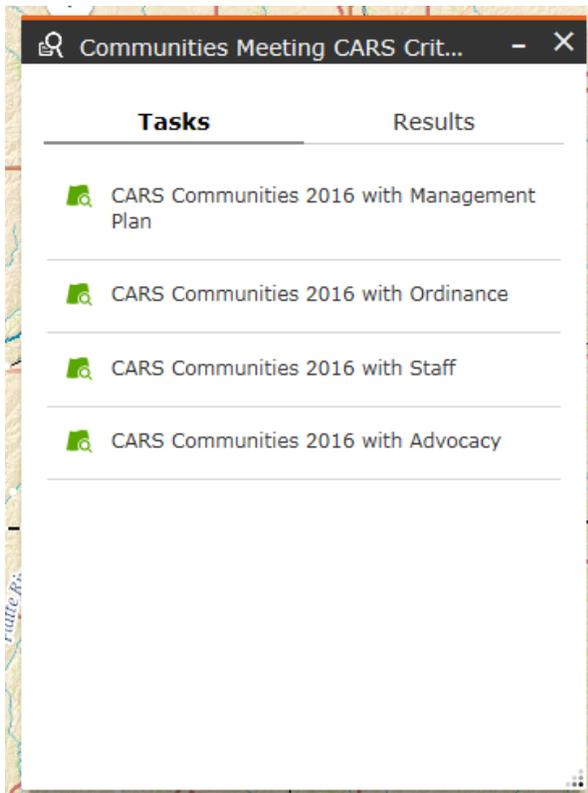
A drop-down will appear and at the bottom of the drop down, you will see “Remove This Result” click on this.

This will remove the result in the dialog box and also in the layers list.

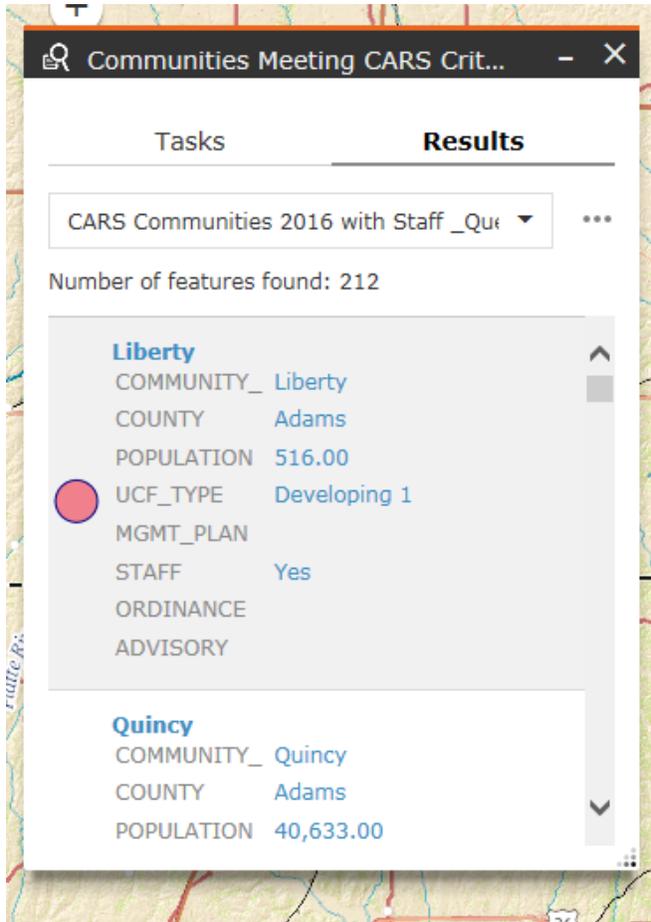
### For example:

I want to delete the query “CARS Communities 2016 with Staff \_Query Result”.

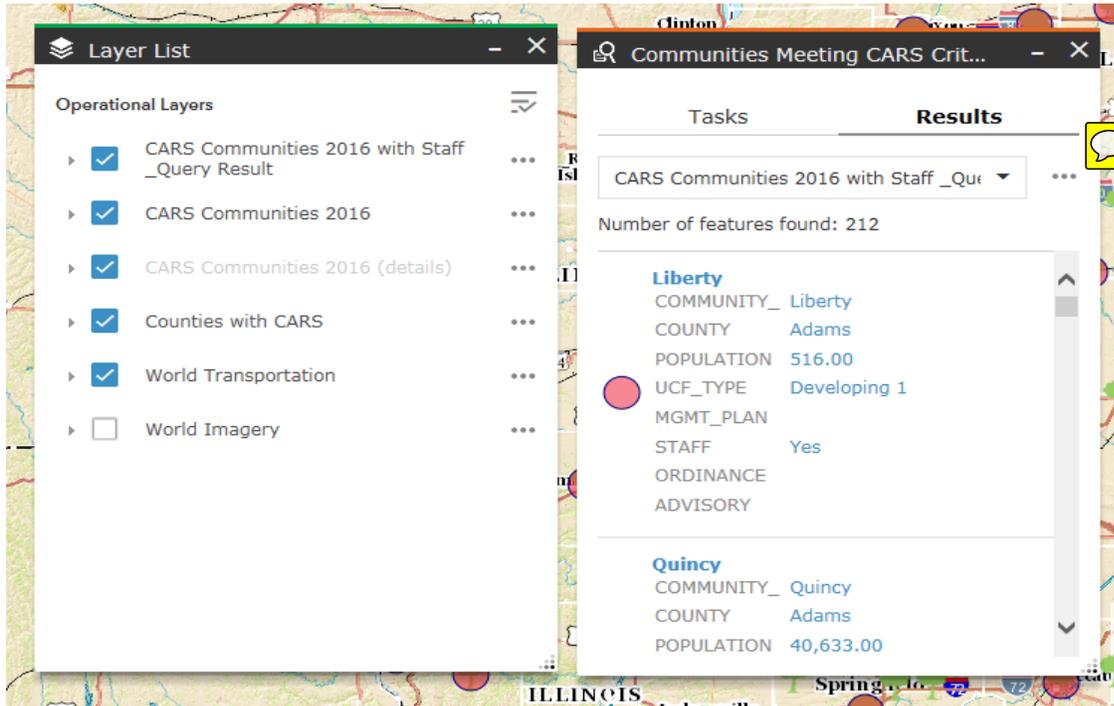
- Go to “Communities meeting CARS criteria” button  and click on it.
- Then click on the query “CARS Communities 2016 with Staff”.



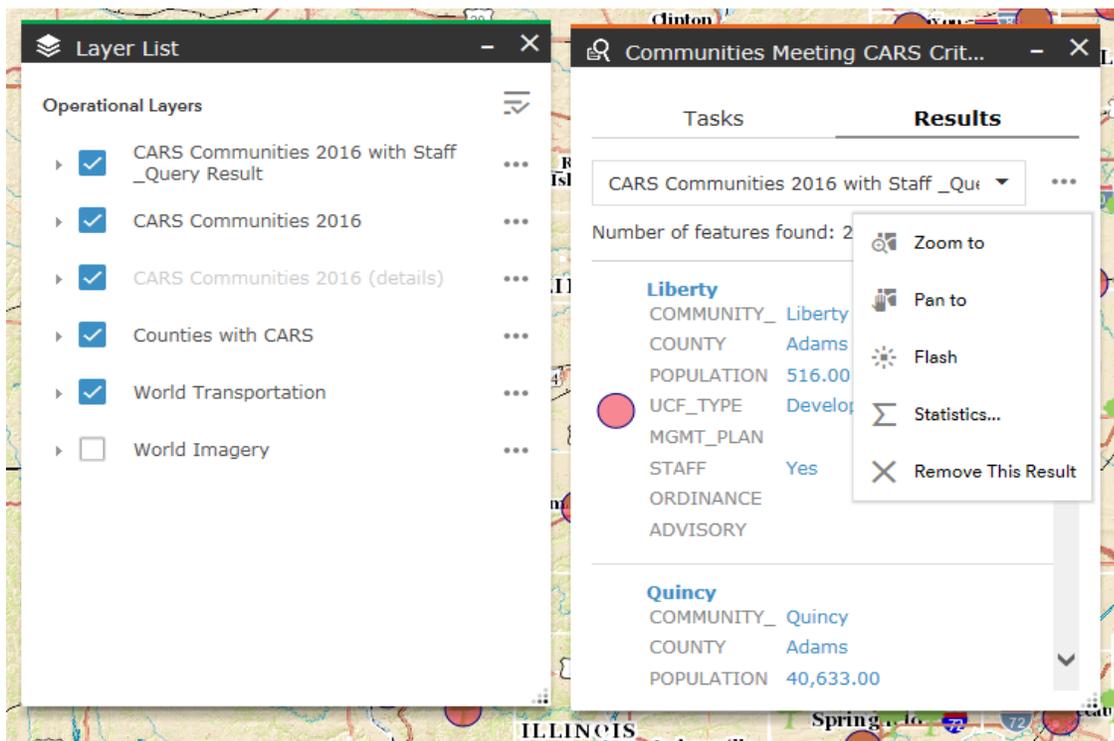
This appears next.



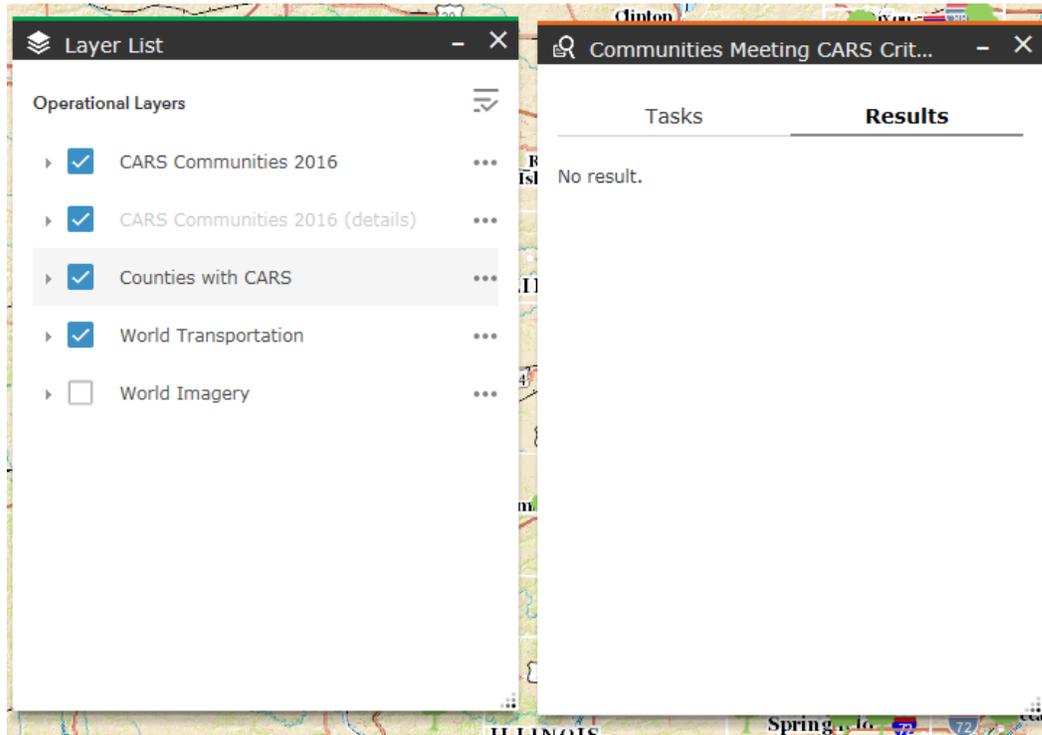
- Next click on the **three dots** which are right side to the query in the dialog box.



- You can see a newly appeared drop-down box that has “Remove This Result” at the bottom.



- Click on that. It deletes the query in the layers list.



**To start your search from the beginning, you can go back to Home button and click on it.**