



# Advancing Transportation through Linkages, Automation, and Screening (ATLAS) Training Courses

**SE.00**

**A Guide to the ATLAS Search Tool**

# Introduction

The ATLAS Search tool is used to search or download data related to project development. Locate and analyze a variety of data layers from multiple sources at once.

After logging in, you will have the option to use several different map functions.

Click on the hyperlinks in the list to the right to jump directly to one of these topics. These individual topics are also available as separate modules in the training library, indicated by the module number in parentheses.

To gain access to ATLAS or for questions, contact [ATLAS@ncdot.gov](mailto:ATLAS@ncdot.gov).



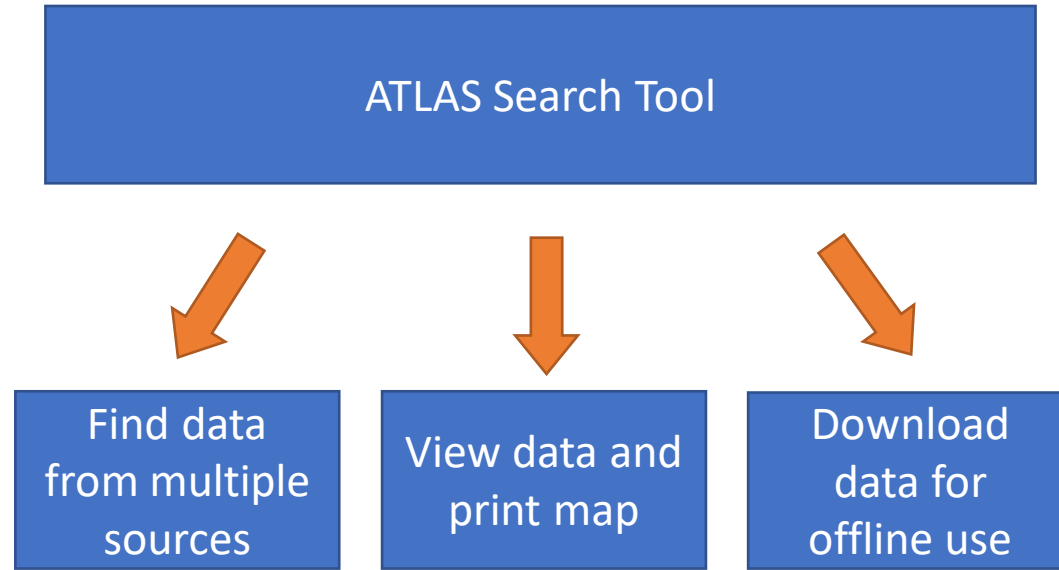
## Learning Outcomes

In this module, the user will gain an understanding of how to:

- ▶ [Log into ATLAS](#)
- ▶ [Overview of the Search Tool](#)
  - ▶ [Zoom Into Area of Interest](#)
  - ▶ [Select Layers](#)
  - ▶ [Add Labels/Images and Measure](#)
  - ▶ [Download Layers or Print Map](#)



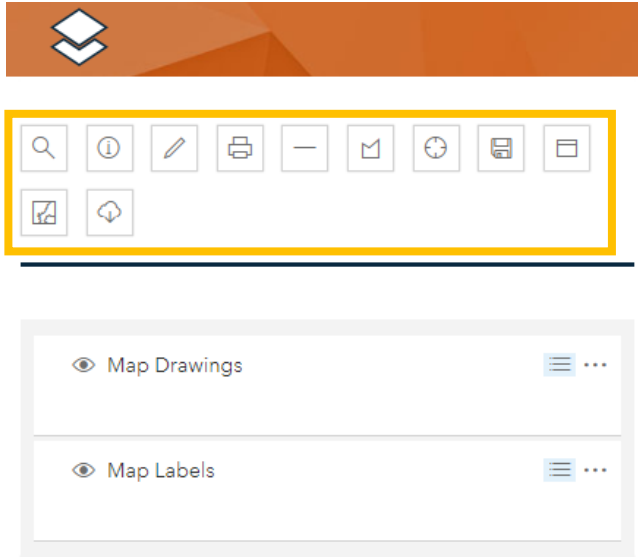
Tip: The Search Tool will time out after a period of inactivity. That may result in the map freezing, or some of the buttons becoming inactive. If this occurs, restart the Search Tool.



- 0.1 The ATLAS Search Tool has 3 primary high-level functions:
1. Find GIS data from multiple sources in one place
  2. View data on map
  3. Download multiple data sources at once in GDB, SHP, and/or DGN format

The ATLAS Search tool is useful when preparing for scoping, completing a technical report, or compiling an environmental document. For any data needs, the Search tool eliminates the need to look through various webpages and source agencies.







## 0.2

The Search Tool provides a variety of different functions that can be used together or individually. There are four primary actions that can be done in any order. Click on the hyperlinks below to jump to slides within this training module for each, or advance to the next slide to review them all.




**Zoom Into Area of Interest:** Find an area by downloading or creating a study area, or simply zooming into the map.

- ▶ [Find Location](#) 
- ▶ [Add Study Area](#) 

**Select Layers:** Select the layers to be viewed or downloaded.

- ▶ [Search for Layers](#) 
- ▶ [Save Layer Selection](#) 
- ▶ [Identify Feature](#) 
- ▶ [Load Layer Selection](#) 

**Add Labels/Images and Measure:** Add graphics or take measurements on the map if desired.

- ▶ [Draw](#) 
- ▶ [Measure Area](#) 
- ▶ [Measure Distance](#) 

**Download Layers or Print Map:** Download a PDF of the completed map and download the GIS layers if desired.

- ▶ [Download Data](#) 
- ▶ [Print Map](#) 





# Advancing Transportation through Linkages, Automation, and Screening (ATLAS) Training Courses

## How to Log into ATLAS Search Tool

- Via Direct URL
- Via Connect Homepage
- Via Connect Preconstruction Home
  - Via Connect Project Site

# Accessing ATLAS Screening Tool

There are four ways to log into the Screening Tool.

Click on the hyperlinks in the list to the right to jump directly to one of these methods or continue to advance the module to view all four.

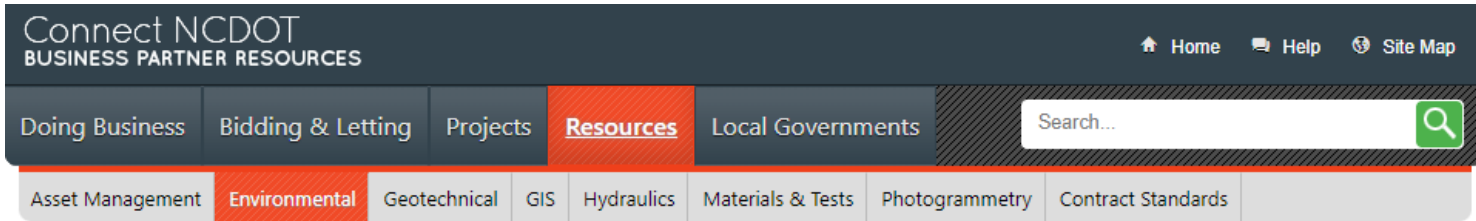
Once you have accessed the tool, you will log in. Click on the links below to jump directly to that topic.

- [Logging in](#) after accessing the Screening Tool
- [Troubleshooting](#) issues

- 0.1 There are four ways to log in to access the ATLAS Screening Tool:
1. [Via Direct URL](#): This the easiest and quickest way to access the ATLAS Screening Tool.
  2. [Via Connect Home Page](#): This is useful if you already find yourself working within the Connect page and want to jump into the Screening Tool.
  3. [Via Connect Preconstruction Home](#): This is useful if you are already logged into the Connect Preconstruction site, but are not on a specific project page.
  4. [Via Project Site](#): When working within projects on the Connect project site, easily jump into the Screening Tool.

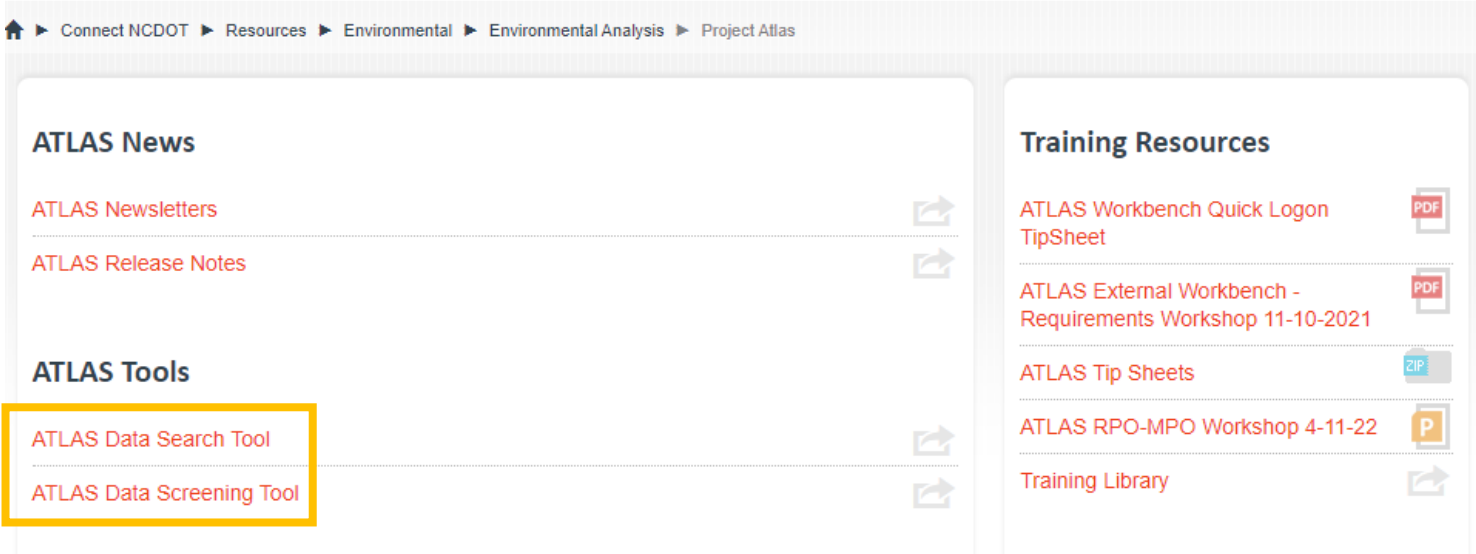


# 1.0 Accessing ATLAS Via Direct URL



## Project ATLAS

Resources for using ATLAS



1.1 When accessing ATLAS via **direct link**, you'll follow this URL:  
<https://connect.ncdot.gov/resources/Environmental/EAU/Project-Atlas/Pages/default.aspx>

1.2 From there, you'll select the **ATLAS Data Search Tool** or **ATLAS Data Screening Tool** in the "ATLAS Tools" section.



Tip: Bookmark this URL for easier future access



Return to Introduction Slide



## 2.0 Accessing ATLAS Via Connect Home Page

Connect NCDOT  
BUSINESS PARTNER RESOURCES

Home Help Site Map

Doing Business Bidding & Letting Projects **Resources** Local Governments

Asset Management Environmental Geotechnical GIS Hydraulics Materials & Tests Photogrammetry Contract Standards

**Resources**  
Data and documents needed to work with the NCDOT.

Connect NCDOT Resources

**Asset Management**  
Utilizes various processes to ensure efficient utilization of resources.

**Environmental**  
NCDOT works diligently to ensure that all projects are conducted in compliance with the National Environmental Policy Act.

**Geotechnical**  
Geotechnical, geoenvironmental and geopavement resources for planning, design, construction and maintenance of the North Carolina highway system.

**GIS**  
GIS Services provided for NCDOT and its customers.

**Hydraulics**  
Guidelines and resources for hydraulic design and highway drainage.

**Additional Resources**

**Project Management**  
To provide resource information on project management to project managers working on NCDOT transportation projects.

**Airport Pavement Management Program**  
Provides central location to store and display pavement related data and inspection results.

**Enterprise System Development Life Cycle (SDLC)**  
Enterprise System Development Life Cycle (SDLC)

**For CADD Consultants**  
Technical support, problem solving, and engineering automation with CADD

**Location & Surveys**

2.1 Begin by accessing the **Connect Home Page URL:**  
<https://connect.ncdot.gov/Pages/default.aspx>

2.2 Then, click the **Resources** button in the header.

Tip: If, after hitting **Resources**, your browser prompts you to Sign In, you can hit Cancel and continue the steps to accessing your ATLAS account.



Generally, this pop up appears to non-NCDOT users.

Sign in  
https://connect.ncdot.gov

Username

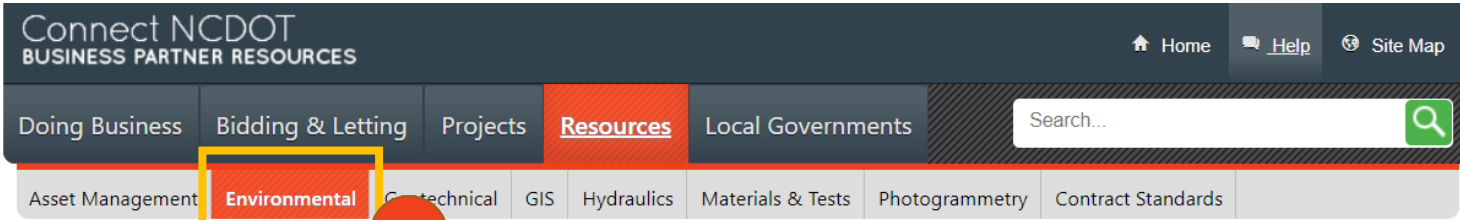
Password

Sign in Cancel



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### Environmental Compliance

NCDOT works diligently to ensure that all projects are conducted in compliance with the National Environmental Policy Act.

Connect NCDOT > Resources > Environmental

### Environmental Analysis

Resources for conducting Natural and Human Environment Studies.

### Environmental Policy

Helping staff ensure compliance with the National Environmental Policy Act and other environmental policies and regulations.

#### Quick Links

##### AGENCY INFORMATION

[Subject Matter Expert Contact List](#)

[Agency Contact Information Map](#)

##### CALENDAR

2.3 Next, click **Environmental** in the grey bar at the top of the screen.

2.4 Then select **Environmental Analysis** from the left side.



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The screenshot shows the 'Connect NCDOT BUSINESS PARTNER RESOURCES' website. The 'Resources' menu is active, and the 'Environmental' sub-menu is selected. The main content area is titled 'Environmental Analysis' and lists various resource categories. The 'Project ATLAS' category is highlighted with a yellow box. The breadcrumb trail is 'Connect NCDOT > Resources > Environmental > Environmental Analysis'.

**Connect NCDOT**  
BUSINESS PARTNER RESOURCES

Home Help Site Map

Doing Business Bidding & Letting Projects **Resources** Local Governments Search...

Asset Management **Environmental** Geotechnical GIS Hydraulics Materials & Tests Photogrammetry Contract Standards

### Environmental Analysis

Resources for conducting Natural and Human Environment Studies

Connect NCDOT > Resources > Environmental > Environmental Analysis

- Biological Surveys**  
Resources for ESA compliance: T&E surveys - Section 7 consultation - Programmatic Agreements  
[Read More](#) →
- Cultural Resources**  
Resources for Archaeology and Historic Architecture  
[Read More](#) →
- Environmental Coordination & Permitting**  
NRTR - Permitting - Processes and Procedures  
[Read More](#) →
- ETRACS**  
User Resources and Help Files for the Environmental Tracking and Coordination System  
[Read More](#) →
- Mitigation & Modeling**  
Resources for Mitigation and Modeling Group  
[Read More](#) →
- Monitoring & Stewardship**  
Resources for Mitigation Monitoring and Stewardship  
[Read More](#) →
- Project ATLAS**  
Resources for using ATLAS  
[Read More](#) →

**Publications**

✓ Name

Category : Centerline (15)

**Links**

- [About EAU](#)
- [2022 Merger and Interagency Calendar](#)
- [ETRACS - Environmental Tracking and Coordination System](#)
- [Agency Contact Map](#)
- [Merger Meeting Materials: Concurrence Points 1-4](#)
- [2021 Merger and Interagency Meeting Calendar](#)
- [Merger Meeting Materials: Concurrence Points 4B and 4C](#)
- [Permit Applications](#)
- [Issued Permits](#)

**Invoice and Estimate Submittals**

To submit your Invoices and Estimates to

### 2.5 From there, select **Project ATLAS**.



Tip: If you don't see **Project ATLAS** on your screen, scroll down – it will appear alphabetically.



Return to Introduction Slide



Connect NCDOT  
BUSINESS PARTNER RESOURCES

Home Help Site Map

Doing Business Bidding & Letting Projects **Resources** Local Governments

Search...

Asset Management Environmental Geotechnical GIS Hydraulics Materials & Tests Photogrammetry Contract Standards

### Project ATLAS

Resources for using ATLAS

Connect NCDOT Resources Environmental Environmental Analysis Project Atlas

#### ATLAS News

- ATLAS Newsletters
- ATLAS Release Notes

#### ATLAS Tools

- ATLAS Data Search Tool
- ATLAS Data Screening Tool

#### Training Resources

- ATLAS Workbench Quick Logon TipSheet
- ATLAS External Workbench - Requirements Workshop 11-10-2021
- ATLAS Tip Sheets
- ATLAS RPO-MPO Workshop 4-11-22
- Training Library

2.6 You're now in the ATLAS homepage.

Select **ATLAS Data Search Tool** or **ATLAS Data Screening Tool** to continue your log in.



Return to Introduction Slide

## Preconstruction ▸ Preconstruction Projects Home

Preconstruction information for NCDOT Highway and Bridge projects. Send any problems or concerns to [preconstructionhelp@ncdot.gov](mailto:preconstructionhelp@ncdot.gov). Send ProjectWise issues to [dot.pwsupport@ncdot.gov](mailto:dot.pwsupport@ncdot.gov).

Home

My Precon

- Precon Dashboard
- My Precon Projects
- My Submittal Reviews

Tools

- **ATLAS Data Search Tool**
- ATLAS Data Screening Tool
- Letting Admin Dashboard
- Manage Project Contacts
- Preconstruction Search
- Usage Assessment

Resources

- Bridge Plans and Reports
- Discipline Specific Links
- Division Specific Guidance
- ORD Working Documents & Action Items

Find a Site

U-6004

Division 01	BP1.R004.1 Bertie 9
	BP1.R005.1 Tyrrell 23
Division 02	R-2574
Division 03	R-5808
	R-5809
Division 04	R-5809A NC 45 south of US 17
Division 05	R-5809B NC 45 north of US 17
	R-5856
Division 06	Webinar lab test rename title
Division 07	
Division 08	

3.1 To access ATLAS via the **Preconstruction Home** page, navigate to the Preconstruction homepage and select **ATLAS Search Tool** from the left-hand side menu.



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## Preconstruction ▸ Preconstruction Projects Home

Preconstruction information for NCDOT Highway and Bridge projects. Send any problems or concerns to [preconstructionhelp@ncdot.gov](mailto:preconstructionhelp@ncdot.gov). Send ProjectWise issues to [dot.pwsupport@ncdot.gov](mailto:dot.pwsupport@ncdot.gov).

Division	Project Name
Division 01	BP1.R004.1 Bertie 9
Division 01	BP1.R005.1 Tyrrell 23
Division 02	R-2574
Division 03	R-5808
Division 03	R-5809
Division 04	R-5809A NC 45 south of US 17
Division 05	R-5809B NC 45 north of US 17
Division 05	R-5856
Division 06	Webinar lab test rename title
Division 07	
Division 08	

4.1 To access ATLAS via the **Connect Project Site**, navigate to the Preconstruction homepage and search your project in the **Find a Site** search bar.



Return to Introduction Slide



Division 09 Preconstruction ▶ U-6004

**Preconstruction Home**

**Precon Dashboard**

**Project Site**

- Change Report
- Recently Modified
- Key Documents
- Project Contacts
- Email Project Contacts
- Project Info U-6004
- Project Structures

**Project Management**

- Project Schedule

**Precon Tools**

- Pay Items & Quantities
- Project Commitments
- Submittal Tracker
- Avoidance and Minimization Tracker

**Processing Requests**

- Grant Consulting Firm Access
- Grant Municipality Access
- Lock/Unlock Projects
- Unlock Pay Items

**Reference**

- Preconstruction Help
- Discipline Specific Links

**ATLAS Tools**

- ATLAS Workbench
- ATLAS Data Search Tool
- ATLAS Screening Tool

**NOTICE:** All libraries will be locked approximately 7 weeks prior to letting to ensure there are no changes during plan checking and finalization. Everything is uploaded and marked before locking. This includes final sealed plans, final sealed special provisions, labeling key documents. For any changes or additions needed after this date, please contact the Contract Office for central let projects [finalplans@ncdot.gov](mailto:finalplans@ncdot.gov), or for other let projects.

- ▶ General
- ▶ Disciplines
- ▶ Collaboration
- ▶ LET Preparation
- ▶ Post LET
- ▶ **ATLAS Tools**
  - **ATLAS Workbench**  
Use the Workbench to monitor project status, submit your final project documents, and upload spatial deliverables.
  - **ATLAS Data Search Tool**  
Use the Data Search Tool to access GIS datasets from multiple sources in one single search interface.
  - **ATLAS Screening Tool**  
Use the Screening Tool to analyze a project study area for natural and human environment impacts based on key GIS datasets.

**Consulting Firm Access Summary**

Role	Firm Name
Utilities	CH Engineering PLLC
Roadway Design	Michael Baker Engineering Inc
Roadway Design	Pinecone Transportation Professionals PLLC
Project Management	Michael Baker Engineering Inc
Project Management	Pinecone Transportation Professionals PLLC
Utilities	Michael Baker Engineering Inc
Utilities	Pinecone Transportation Professionals PLLC
Right of Way	Michael Baker Engineering Inc
Right of Way	Pinecone Transportation Professionals PLLC
Location and Surveys	Wadelynn Geospacial LLC
Location and Surveys	NV5 ( formerly CALYX Engineers and Consultants Inc)
Location and Surveys	O. R. Colan Associates LLC
Location and Surveys	Mattern & Craig Inc

- 4.2
1. In the menu on the left side, under the **ATLAS Tools** section at the bottom of the list.
  2. From the bottom tab on the right side, under the **ATLAS Tools** tab.

1

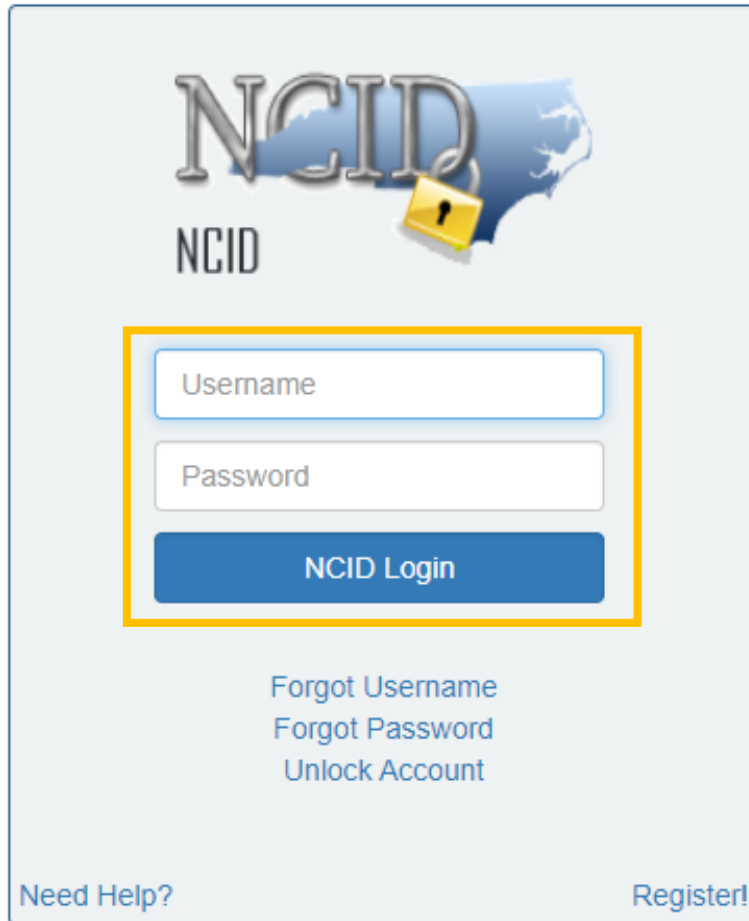
2



Return to Introduction Slide



### NCID Tips



NCID

NCID

Username

Password

NCID Login

Forgot Username  
Forgot Password  
Unlock Account


Need Help? Register!

5.1 You will need to log into ATLAS regardless of the method you used to access the ATLAS Screening Tool if you are an NCDOT or non-NCDOT user, or if you previously logged into Connect.

When prompted with this log in, fill out your NCID **Username** and **Password**.

5.2 Click the **NCID Login** button.



Sign in to NCDOT Enterprise GIS (Prod) 

**USING YOUR NCID ACCOUNT**

OR

**USING YOUR ARCGIS ACCOUNT**

5.3 In the next pop-up, choose **Using your NCID account**.





5.4 When prompted with the **Disclaimer**, click **I Accept** and you're in!



ATLAS may automatically log out after a period of inactivity, or will stop operating correctly.



ATLAS Search Tool



### Disclaimer

#### General

The N.C. Department of Transportation takes great care to provide secure, accurate and complete information for this service.

At the same time, the State of North Carolina, including NCDOT and its employees or agents, shall not be liable for damages or losses of any kind arising out of or in connection with the use of information on this site, including but not limited to, damages or losses caused by reliance upon the accuracy or timeliness of any such information or damages incurred from the viewing, distributing or copying of those materials.

The materials and information provided on this website are provided "as is." No warranty of any kind, implied, expressed or statutory, including but not limited to the warranties of non-infringement of third party rights, title, merchantability, fitness for a particular purpose and freedom from computer virus, is given with respect to the contents of this site or its hyperlinks to other Internet resources.

#### ATLAS

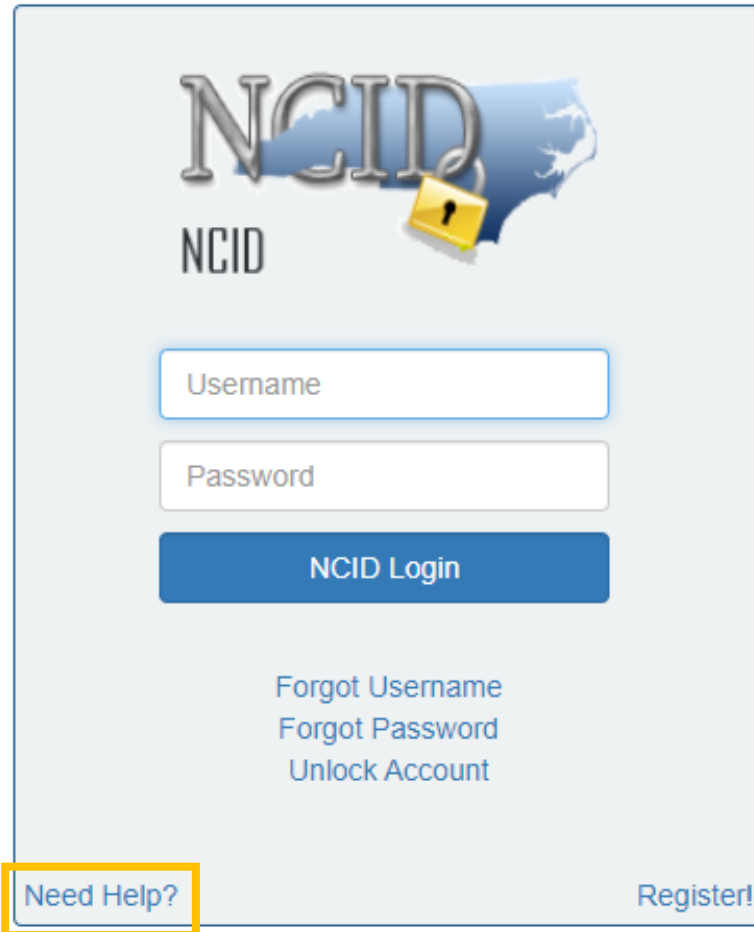
I Accept



Return to Introduction Slide



### NCID Tips



The image shows a screenshot of the NCID login interface. At the top, there is a logo for NCID featuring the letters 'NCID' in a stylized font with a map of North Carolina behind them and a yellow padlock icon. Below the logo, the text 'NCID' is displayed. There are two input fields: 'Username' and 'Password'. A blue button labeled 'NCID Login' is positioned below the password field. Underneath the login button, there are three links: 'Forgot Username', 'Forgot Password', and 'Unlock Account'. At the bottom left of the form, there is a link 'Need Help?' which is highlighted with a yellow border. At the bottom right, there is a link 'Register!'.

- 6.1 If you're having issues with your **NCID** log in, you can follow the **Need Help?** prompt.



6.2 If you're having issues within your ATLAS account, you can follow the **Help** function found on the header or send an email to **ATLAS@ncdot.gov**.



ATLAS Search Tool



About

Additional Resources

Help

## Help

**Need training?** Training materials are available under the Additional Resources tab.

**Have questions or comments?** We have an ATLAS service account. Please email us at [ATLAS@ncdot.gov](mailto:ATLAS@ncdot.gov) with your questions.



Return to Introduction Slide





# Advancing Transportation through Linkages, Automation, and Screening (ATLAS) Training Courses

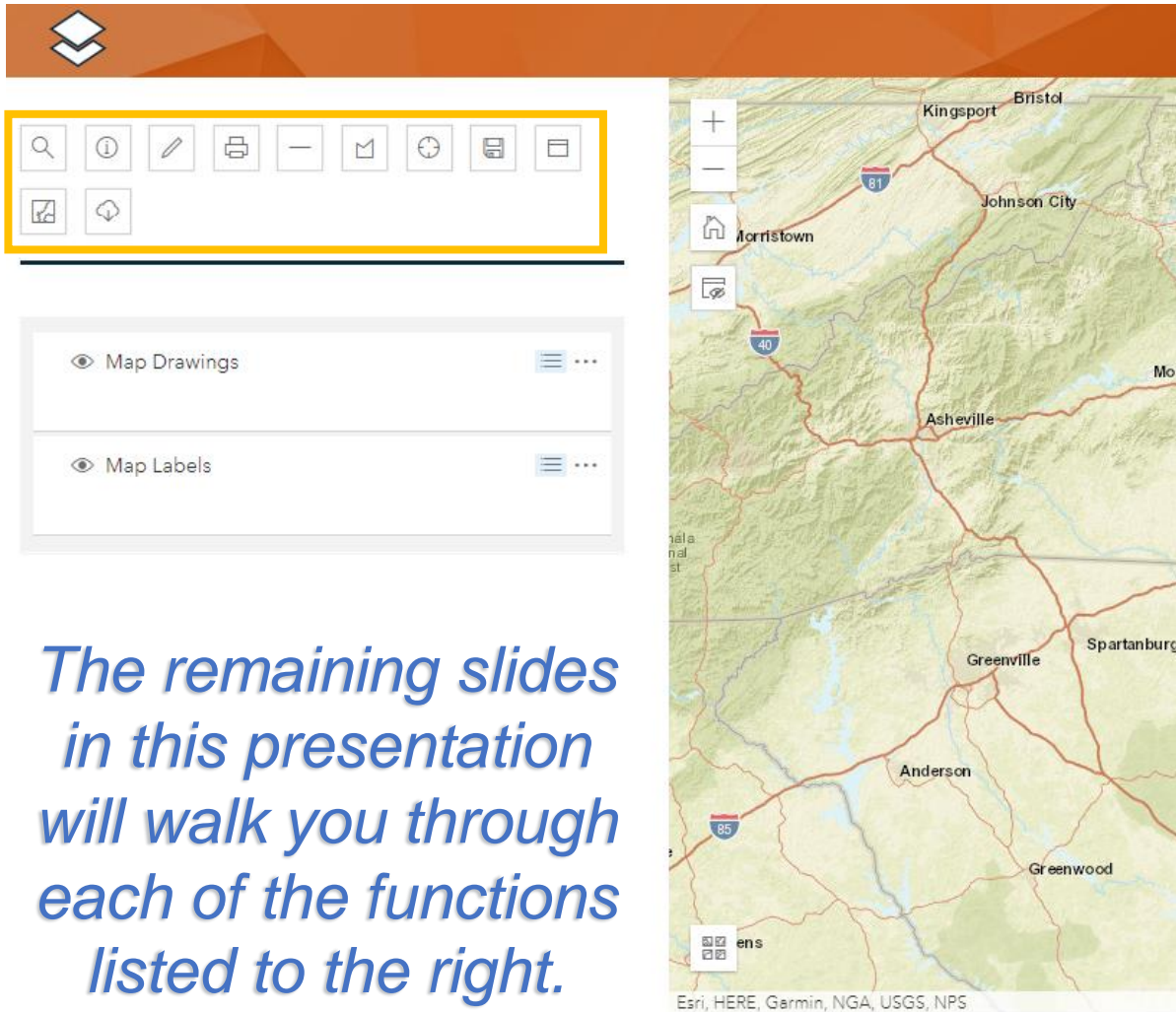
Overview of the Search Tool



## 1.1 The header houses four functions:

- 1** ▶ **ATLAS Screening Tool** icon: Allows users to access the ATLAS Screening Tool; this will open in a new window
- 2** ▶ **About**: Takes users to a comprehensive page describing ATLAS, its tools, and previous updates
- 3** ▶ **Additional Resources**: Leads to a page of linked resources and their descriptors for additional information
- 4** ▶ **Help**: A link to the email to use for any questions or problems you may have: [ATLAS@ncdot.gov](mailto:ATLAS@ncdot.gov)







The screenshot shows the ATLAS Search Tool interface. On the left, there is a toolbar with icons for search, home, draw, print, zoom in, zoom out, measure, and map settings. Below the toolbar are two panels: 'Map Drawings' and 'Map Labels', both with visibility toggles and menu options. On the right, a map of the Asheville region is displayed, showing major roads like I-81, I-40, and I-85, and cities like Kingsport, Bristol, Johnson City, Morristown, Asheville, Greenville, Spartanburg, Anderson, and Greenwood. The map includes a scale bar and a legend.

*The remaining slides in this presentation will walk you through each of the functions listed to the right.*

2.1 The following slides provide detail on each of the following functions, which can be done in any order:


**Zoom Into Area of Interest:** Find an area by downloading or creating a study area, or simply zooming into the map.

- ▶ [Find Location](#) 
- ▶ [Add a Study Area](#) 

**Select Layers:** Select the layers to be viewed or downloaded.

- ▶ [Search for Layers](#) 
- ▶ [Save Layer Selection](#) 
- ▶ [Identify Feature](#) 
- ▶ [Load Layer Selection](#) 

**Add Labels/Images and Measure:** Add graphics or take measurements on the map if desired.

- ▶ [Draw](#) 
- ▶ [Measure Area](#) 
- ▶ [Measure Distance](#) 

**Download Layers or Print Map:** Download a PDF of the completed map and download the GIS layers if desired.

- ▶ [Download Data](#) 
- ▶ [Print Map](#) 



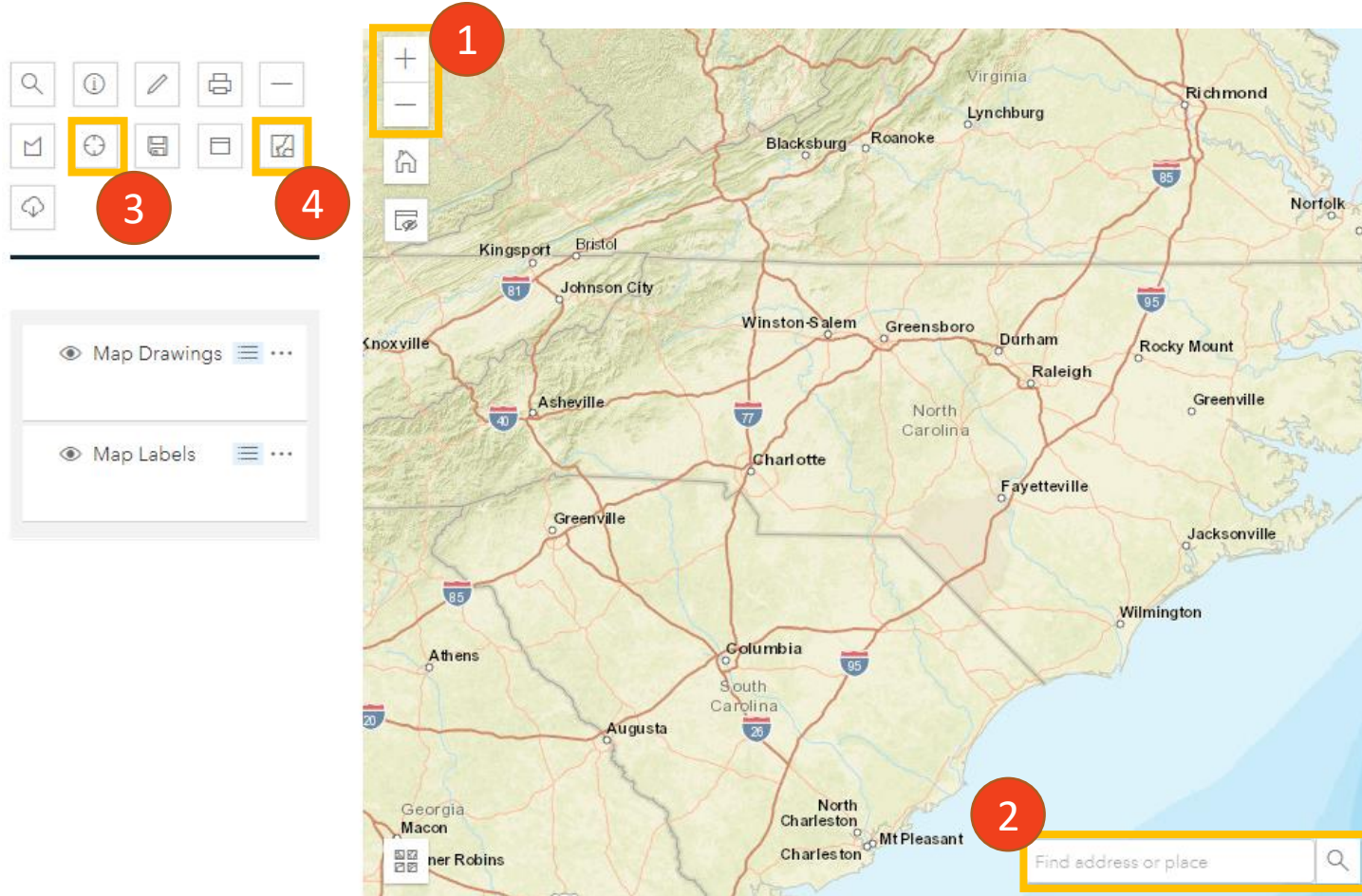
Return to Introduction Slide



# Advancing Transportation through Linkages, Automation, and Screening (ATLAS) Training Courses

**Zoom Into Area of Interest**





0.1 There are four ways to zoom into your area of interest:

- 1 Zoom In
- Zoom Out

2 Location Search

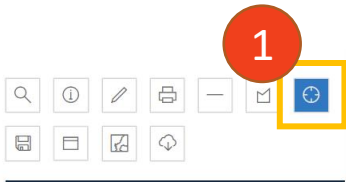
3 Use Coordinates

*More information about how to use the Coordinates is on the following **Find Location** slide.*


4 Add Study Area

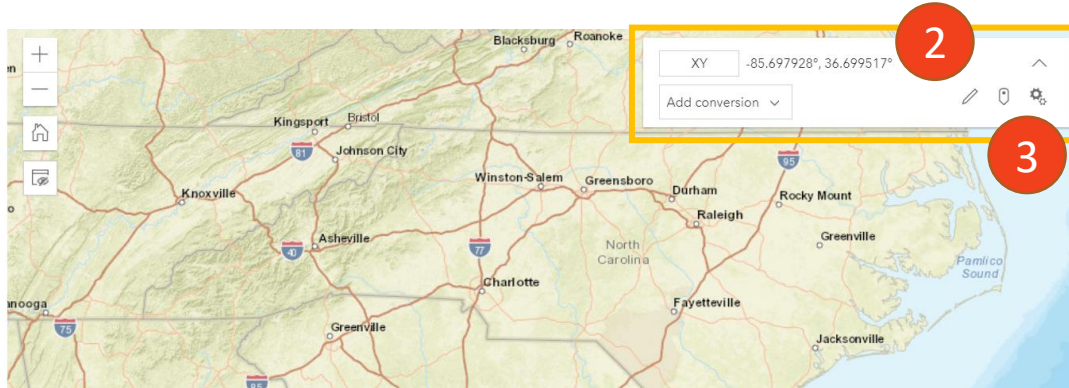
*More information about how to build or import a study area is on the following **Add a Study Area** slide.*








2.1 Click the **Find Location** icon to find the coordinates of any point on the map.

Click the  icon, then move anywhere on the map to see its location. The XY coordinates will be displayed on the top right corner of the map.



To zoom to a specific location, click on the  button on the far right side of the menu, then click on the  button. Check the box next to “Go to location,” enter the coordinate pairing, and click “Enter” on your keyboard.

Click on the  button to convert your XY coordinates to a different unit.

ATLAS Search Tool

2

Information

Select how you will define your study area: The size of an uploaded or drawn Study Area is limited to a 10 square miles area. If your project study area is greater than 10 square miles, we suggest breaking your study area into smaller study areas and merging your data in your local GIS software.

1

Upload

Draw

3

OK

About Additional Resources Help

Find address or place

2.1 When adding a study area, you can choose to **Upload** or **Draw** your area.

1

*More details on both options are on the following slides.*

2 Once you click the map icon, you'll see an **Information** box that notes your study area is limited to 10 square miles.

2

3 Clicking **OK** will close this window.

3



ATLAS Search Tool

Information

Select how you will define your study area: The size of an uploaded or drawn Study Area is limited to a 10 square miles area. If your project study area is greater than 10 square miles, we suggest breaking your study area into smaller study areas and merging your data in your local GIS software.

OK

Upload

Draw

Map Drawings

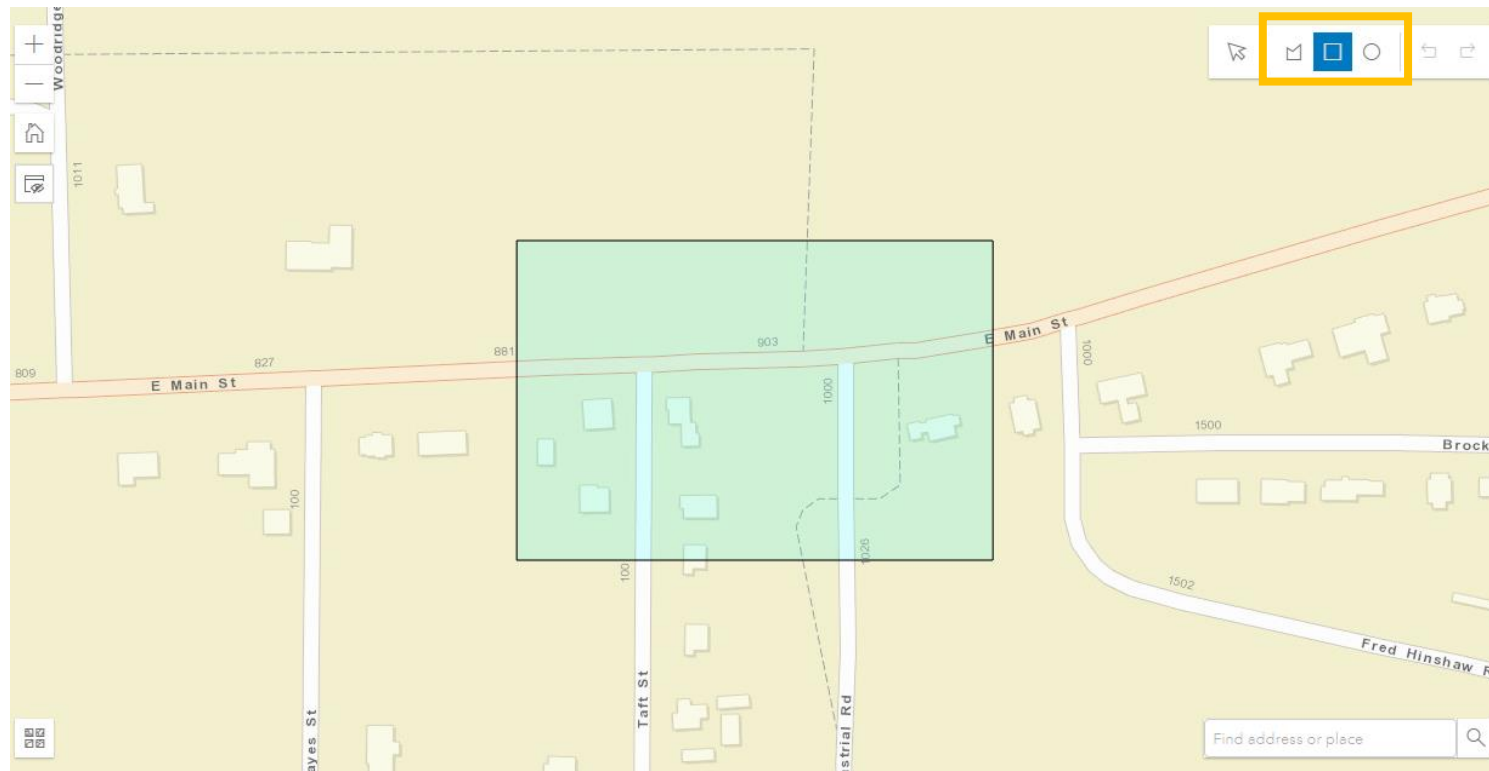
Map Labels

Find address or place

2.2 To **Upload a Study Area**, you'll be brought to a navigation window, which you can use to click through your computer's files and select a map of the study area. This file must be a zipped shapefile.

**Reminder:** Your study area must be 10 square miles or less.





2.3 To **Draw a Study Area**, you can choose between a custom polygon, or a standard rectangle or circle.

Once you choose a shape, draw your study area.

**Reminder:** Your study area must be 10 square miles or less.

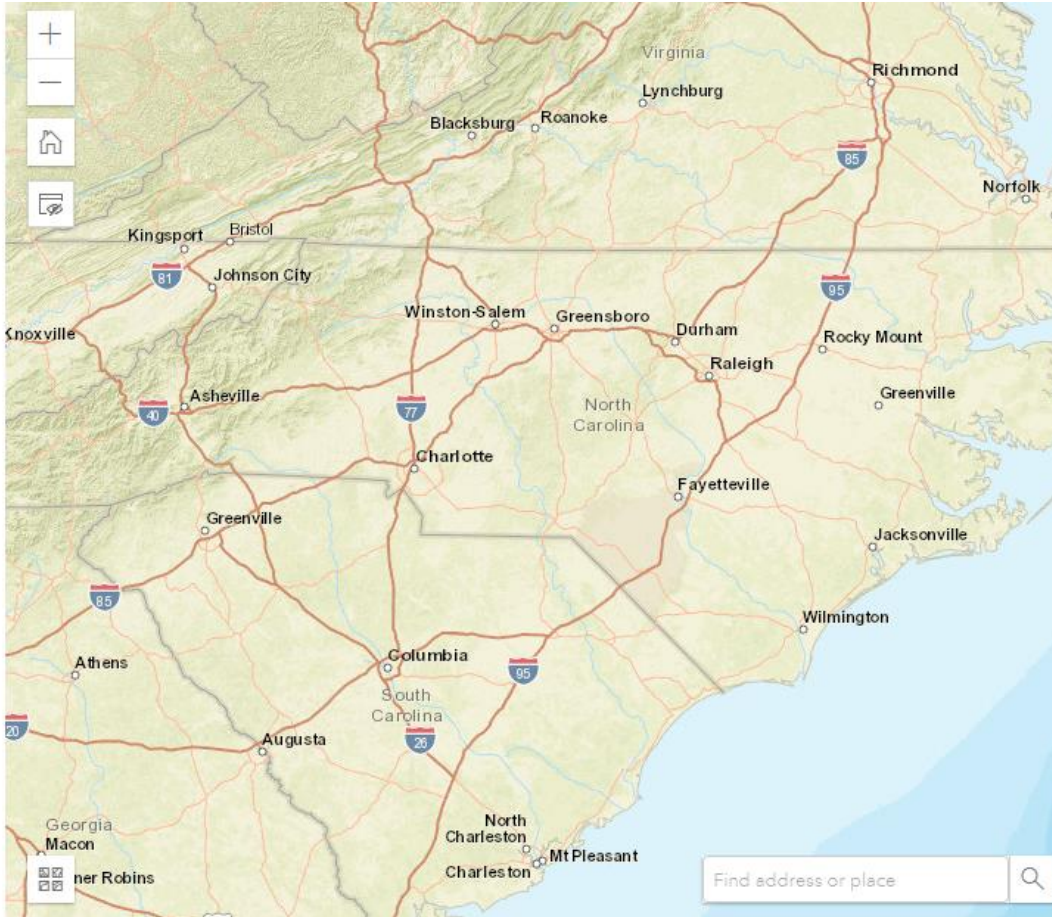
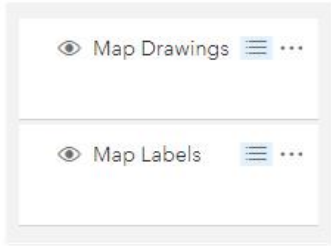
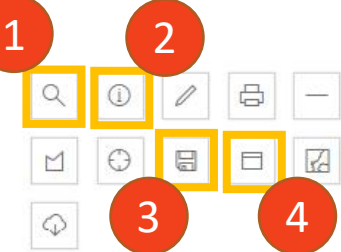




# Advancing Transportation through Linkages, Automation, and Screening (ATLAS) Training Courses


Select Layers






0.1 There are four options in the layer selection function.

*More information about these options are on the following slides.*

1 ▶ Search for Layers 

2 ▶ Identify Feature 

3 ▶ Save Layer Selection 

4 ▶ Load Layer Selection 

1



2

**Search for Layers**

Search by  Category

Keyword  Reset

Layers Meeting Search Criteria: 749    Layers Selected: 0

- + Human Environment
- + Natural Environment

Layers without a checkbox are secured and cannot be added to the map.

\* indicates that a layer is available for selection in the ATLAS Screening Tool.


3

**Layer Details**

Click a layer name after performing a search for more information.

Back to Map

4


1.1 Use this tool to add layers to your map. When you click on the , a new menu will open.

2 Data can be searched by category or key word.

3 The layers are organized into two main categories: **Human Environment** and **Natural Environment**.

*More information about the search options are in the following slides.*

4 Click **Back to Map** at any time to see the selected layers on the map. You can switch back and forth between the map and layer selection.

 Layers without checkboxes are secured and cannot be added to the map.

**Search for Layers**

Search by ⓘ

Keyword ⓘ

Layers Meeting Search Criteria: 785      Layers Selected: 0

- Human Environment
  - Boundaries
    - FEMA Hazard Mitigation Properties\*
    - NC MPO RPO Boundary\*
    - NC Opportunity Zones
    - NC Statewide Parcel Data Centroids
    - NC Statewide Parcel Data Polygons

Layers without a checkbox are secured and cannot be added to the map.

\* indicates that a layer is available for selection in the ATLAS Screening Tool.

1.2 You'll notice as you work through the **ATLAS Search Tool** that sometimes there is an asterisk (\*) next to certain data layers.

All layers are available in the **ATLAS Search Tool**. This asterisk is an indicator that this specific layer is also available in the **ATLAS Screening Tool**.





**Search for Layers**

Search by ⓘ

Keyword ⓘ

**Layers Meeting Search Criteria: 9**    Layers Selected: 5

- + Human Environment
- + Natural Environment

Layers without a checkbox are secured and cannot be added to the map.

\* indicates that a layer is available for selection in the ATLAS Screening Tool.

1.3 The **Layers Meeting Search Criteria** indicator is there to show you how many layers are available for use that meet the search criteria you used.

When you expand the **Human Environment** and **Natural Environment** tabs, the sub-categories containing the layers meeting your search criteria will be listed.



**Search for Layers**

Search by ⓘ Category ▼

Keyword ⓘ Category  
Document  
Organization

Layers Meeting Search Criteria: 785      Layers Selected: 0

- Human Environment
  - Boundaries
    - FEMA Hazard Mitigation Properties\*
    - NC MPO RPO Boundary\*
    - NC Opportunity Zones
    - NC Statewide Parcel Data Centroids
    - NC Statewide Parcel Data Polygons

Layers without a checkbox are secured and cannot be added to the map.  
\* indicates that a layer is available for selection in the ATLAS Screening Tool.

1.4 There are 3 types to search from:

- ▶ **Category:** Available layers are grouped by topic or theme
- ▶ **Document:** Available layers are grouped by the type of report or deliverable for which they are often utilized
- ▶ **Organization:** Available layers are grouped by the source of the data

*These options are described in more detail on the following slides.*

Click the + next to each category to expand the selection.

Click in the box to the left of each layer name to select one or more of these data layers. Clicking again in the box will un-select that layer.



Return to Introduction Slide

**Search for Layers**

Search by ⓘ Category ▼

Keyword ⓘ  Reset

Layers Meeting Search Criteria: 785      Layers Selected: 2

- Human Environment
- Boundaries
  - FEMA Hazard Mitigation Properties\*
  - NC MPO RPO Boundary\*
  - NC Opportunity Zones
  - NC Statewide Parcel Data Centroids
  - NC Statewide Parcel Data Polygons

Layers without a checkbox are secured and cannot be added to the map.

\* indicates that a layer is available for selection in the ATLAS Screening Tool.

1.5 Under the **Category** button, available layers are grouped by topic or theme.



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### Search for Layers

Search by ⓘ Document ▼

Keyword ⓘ  Reset

Layers Meeting Search Criteria: 1612      Layers Selected: 3

— Air Report

- EPA Ozone 8 hr (1997 Standard)
- EPA PM2 5 24hr (2006 standard)
- EPA PM2 5 Annual (1997 standard)
- NC Statewide Parcel Data Centroids
- NC Statewide Parcel Data Polygons
- NCDOT All State Maintained Roads\*

Layers without a checkbox are secured and cannot be added to the map.

\* indicates that a layer is available for selection in the ATLAS Screening Tool.

1.6 Under the **Document** button, available layers are grouped by the type of report or deliverable for which they are often utilized.




These documents include natural resources reports, community impact assessments, comprehensive transportation plans, noise reports, and land use assessments, among others.




Note that some layers are used in multiple documents, and therefore can be found in multiple drop-downs.



### Search for Layers

Search by  Organization

Keyword   Reset

Layers Meeting Search Criteria: 785      Layers Selected: 5

- City of Raleigh, NC
  - Force Main - City of Raleigh
  - Gravity Sewer - City of Raleigh
  - Lateral - City of Raleigh
  - Sewer Manhole - City of Raleigh
  - Sewer Pump Station - City of Raleigh
- + County GIS Alamance County GIS

Layers without a checkbox are secured and cannot be added to the map.  
\* indicates that a layer is available for selection in the ATLAS Screening Tool.

1.7 Under the **Organization** button, available layers are grouped by the source of the data. The ATLAS Search Tool provides access to data developed by dozens of different federal, state, and local agencies. This search option allows users to browse layers by owner.



These organizations can include municipality, county, city, and national organizations, among others.



**Search for Layers**

Search by Category

Keyword **Crash**

Layers Meeting Search Criteria: 9      Layers Selected: 0

- + Human Environment
- + Natural Environment

Layers without a checkbox are secured and cannot be added to the map.  
\* indicates that a layer is available for selection in the ATLAS Screening Tool.

1.8 To search by **Keyword**, type a word into the keyword space relevant to the desired data layer.

Keywords will pull up data sets that contain the search text in their name, description, or owning organization.

Remember: the **Search By** filter will impact how each layer is displayed, for example document will produce all documents with the keyword in it, whereas category and organization only produce one of each layer.

Try using different keywords (for example, “crash” vs. “safety”), or different versions of the same word (for example, “road” vs. “roads”).

**Search for Layers**

Search by Category

Keyword Crash

Layers Meeting Search Criteria: 9      Layers Selected: 0

- Human Environment
- Transportation
  - Animal Crash Data 2015-2019
  - Fatal and Serious Injury Crashes
  - Highway Safety Improvement Program (HSIP) Section Locations
  - NCDOT Bicycle Crashes On Roadway
  - NCDOT Bike-Ped Crash Factors Summary

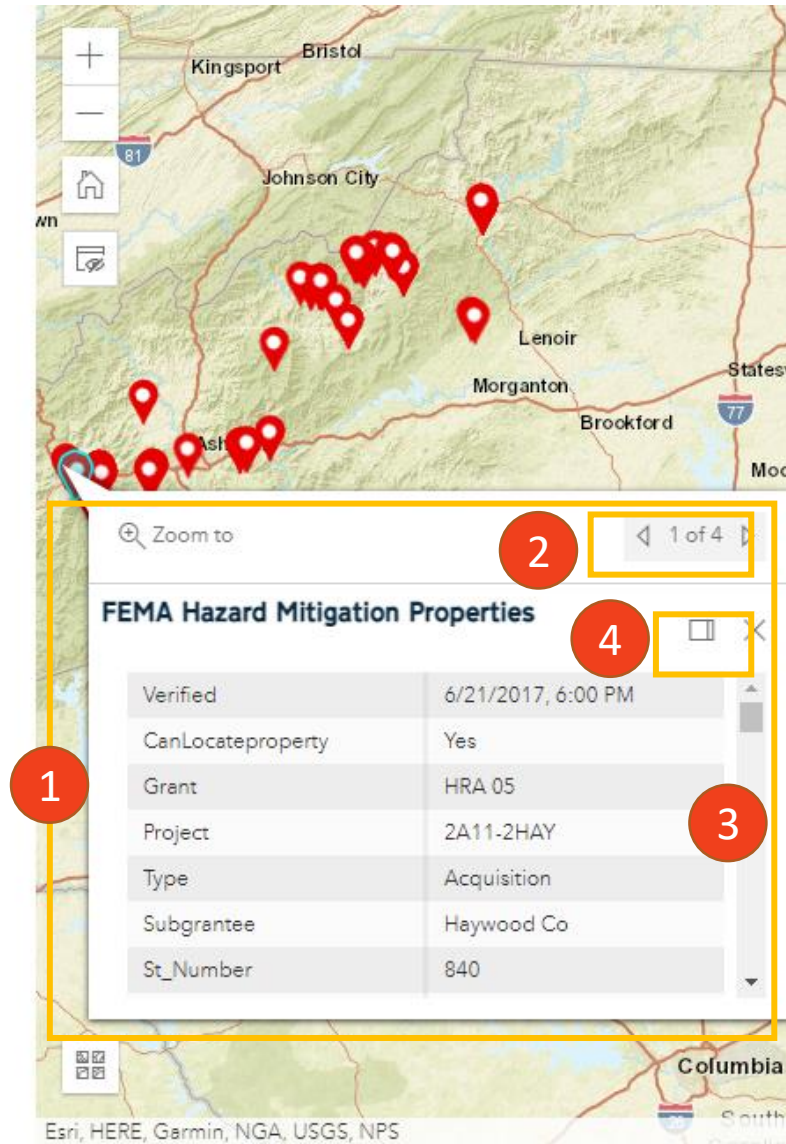
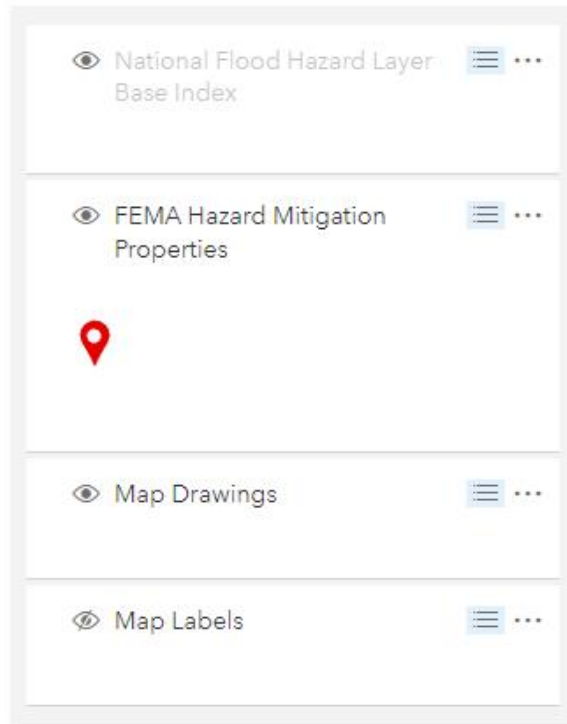
Layers without a checkbox are secured and cannot be added to the map.  
\* indicates that a layer is available for selection in the ATLAS Screening Tool.


**Layer Details**

Layer Name: Animal Crash Data 2015-2019  
Layer Alias: Animal Crash 2015-2019  
Description: Animal related crash data in North Carolina from 1/1/2015 to 12/31/2019. Includes fields for crash county, on road, etc. Only mile posted crashes are shown plotted for this layer  
Owner: NCDOT, Traffic Safety Unit



Return to Introduction Slide



2.1 Use this tool to identify features on the map. Click on the , then click on a feature in the map. A window will appear showing more information on the feature you clicked.



1

If more than one feature exists where you clicked, you may access information on these stacked features by clicking on the forward arrow at the top of the identify window.

2

Relevant data and attachments associated with the feature are in the information window; use the scroll bar to see all data and links.

3

Click on the  to dock the window on the right-hand side of the screen. Click  to close the information window.

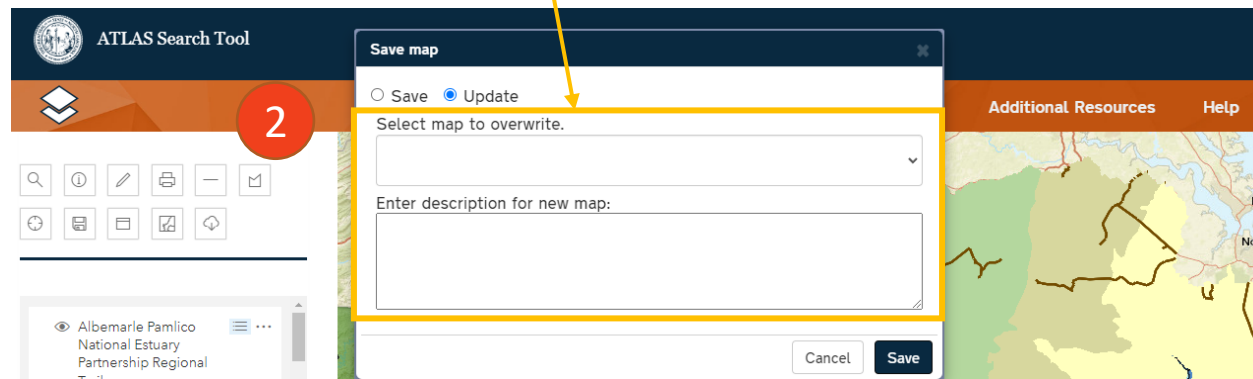
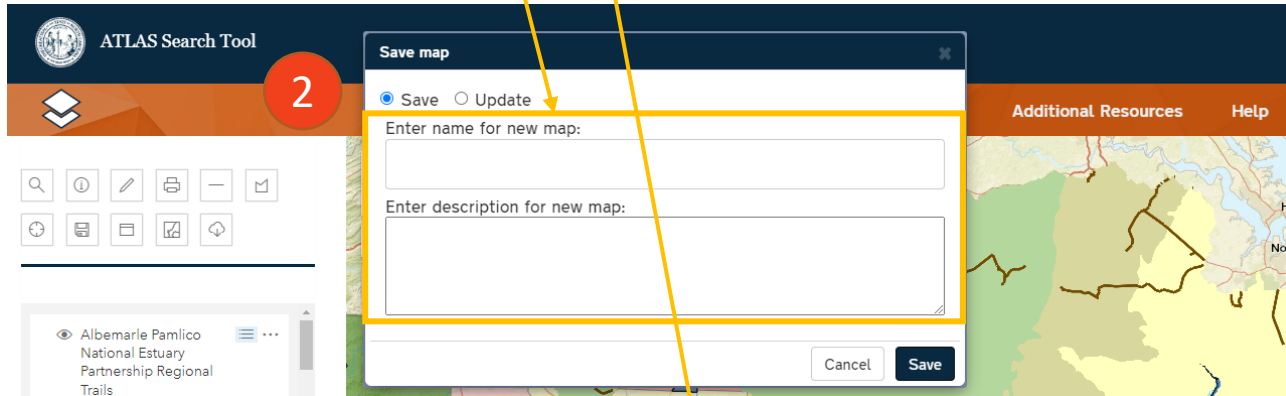
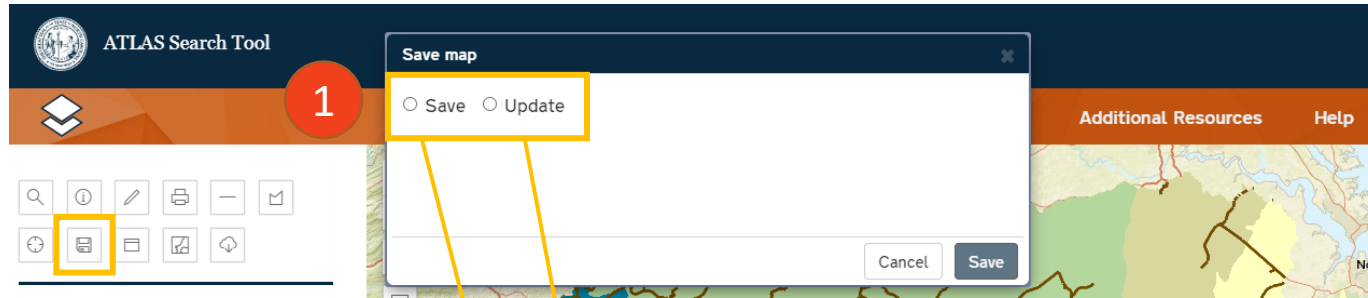
4



Zoom into the map for a more precise location.








3.1 Use the **Save Layer** tool to save a combination of layers that you selected in the **Search for Layers** step. Saving the layer selection makes it available for future use in other maps as a “Saved Map.”

1 To save, add all the layers you want to the layer list, then hit the **Save** button. You can also choose whether you want to **Save** a new layer list or **Update** an old layer list.

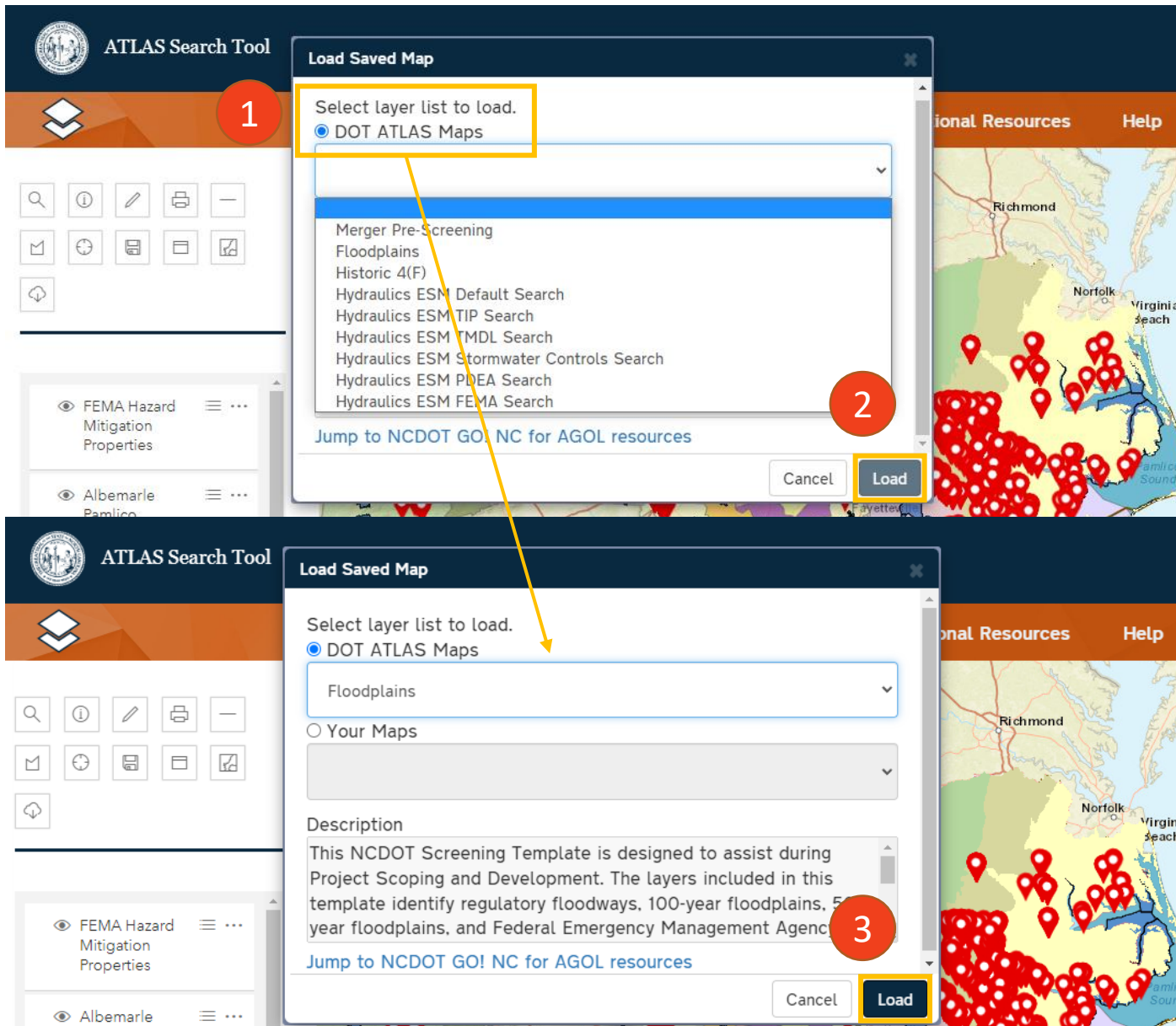
To **Save** a new layer list, enter a **Name** and description.

2 To **Update** a previously-saved layer selection, select the layer list to overwrite and update the description.


 This saved list of layers will be accessible through the **Load Saved Map** step described on the following slide. You may save multiple layer combinations during this step.







4.1 Use the **Load Saved Map** step to add a previously saved list of layers to your map.

Click the  icon and select from either **DOT ATLAS Maps** (NCDOT-created templates) or **Your Maps** (Layer selections you've made and saved in the past).

1

From there select which layers to load by clicking **Load** once to take you to the description window.

2

Then, click **Load** once more to add to them. You can also add or remove layers at this point, after loading the saved list.

3



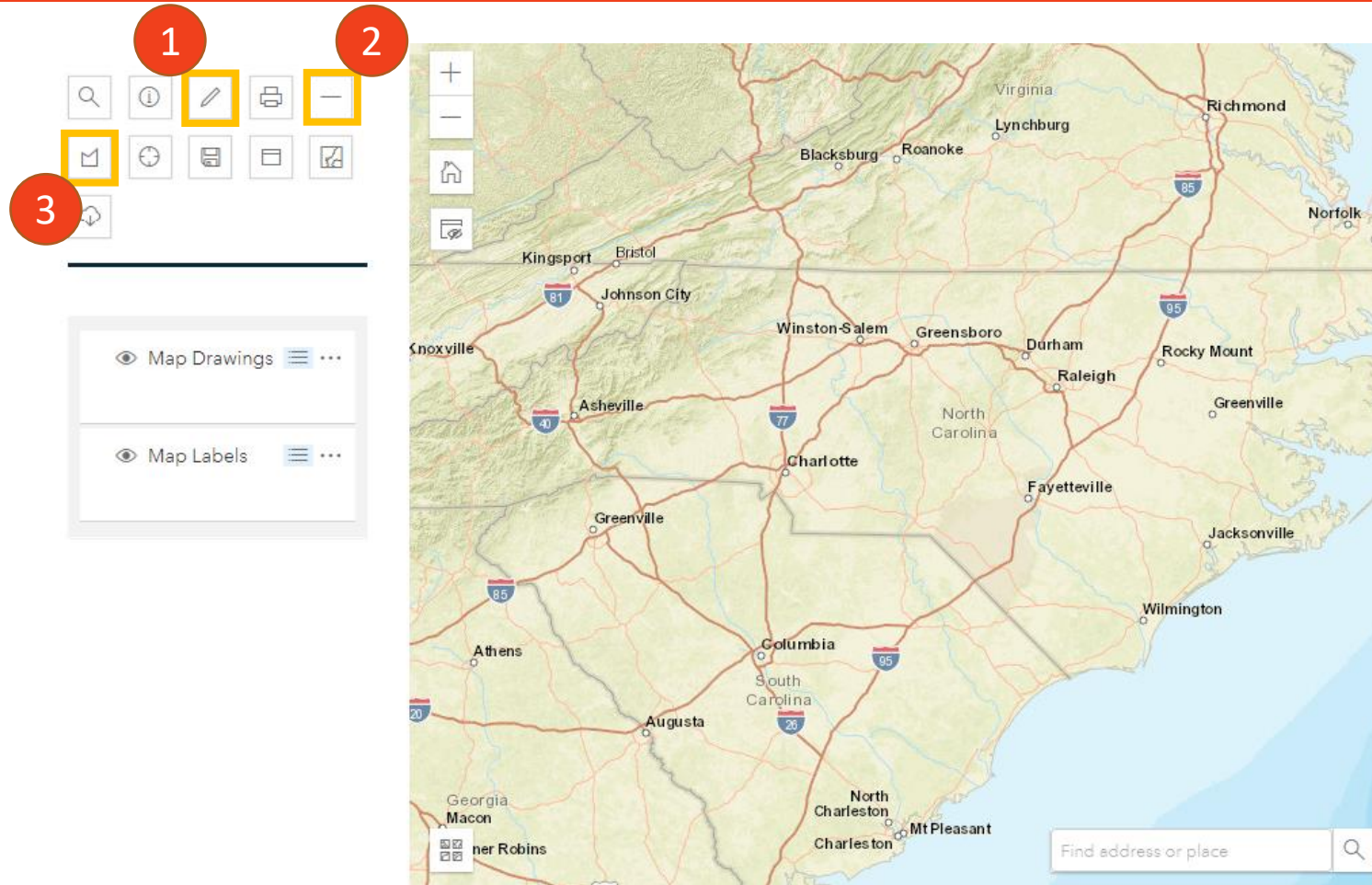
All layers in that set will be added to your legend. This saved list is associated with your NCID and will be available on all Workbench maps for projects you can access.





# Advancing Transportation through Linkages, Automation, and Screening (ATLAS) Training Courses

**Add Labels/Images and Measure**




0.1 There are three options in the labels/images and measuring function.

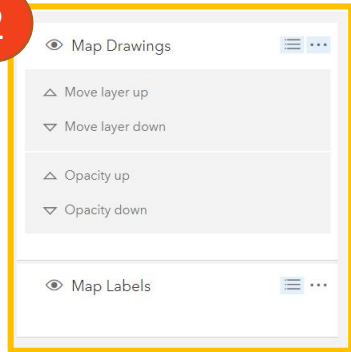
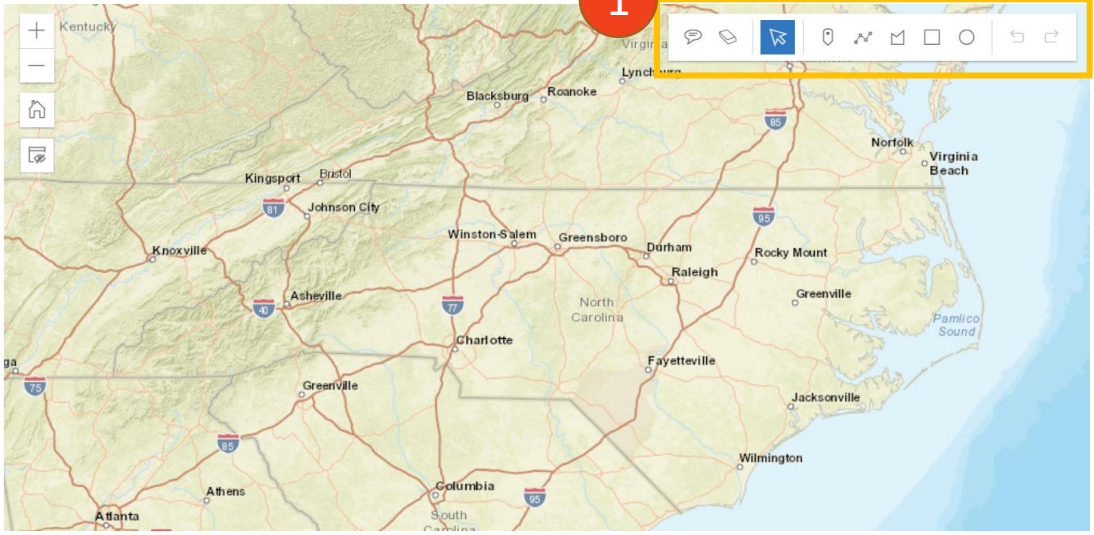
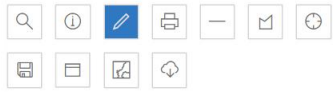
*More information about these options are on the following slides.*


1 ▶ Draw 

*When you click the **Draw** icon, a new tool bar will pop up with additional options.*

2 ▶ Measure Distance 

3 ▶ Measure Area 




1.1 Use the draw tool to add graphics to your map. When you click on the , a new drawing toolbar will appear in the top right corner of the map.


1

Your drawn features will be added to the 'Map Drawings' layer on your Table of Contents (TOC).

2

Use the  icon on the TOC to turn drawn features on and off, move the layers above or below others, or change the opacity (transparency).



The shape drawn with the **draw tool** is temporary for the current session and does not have any data associated with it. You can also label your drawing with the  function.





The screenshot displays the 'Create Label' dialog box overlaid on a map of North Carolina. The dialog box contains the following elements:

- Enter Text:** A text input field.
- Color:** A color selection palette.
- Angle:** A dropdown menu set to 0.
- Weight:** A dropdown menu set to Normal.
- Size:** A dropdown menu set to 10pt.
- Buttons:** 'Cancel' and 'Ok and Select Location' (highlighted with a yellow box).

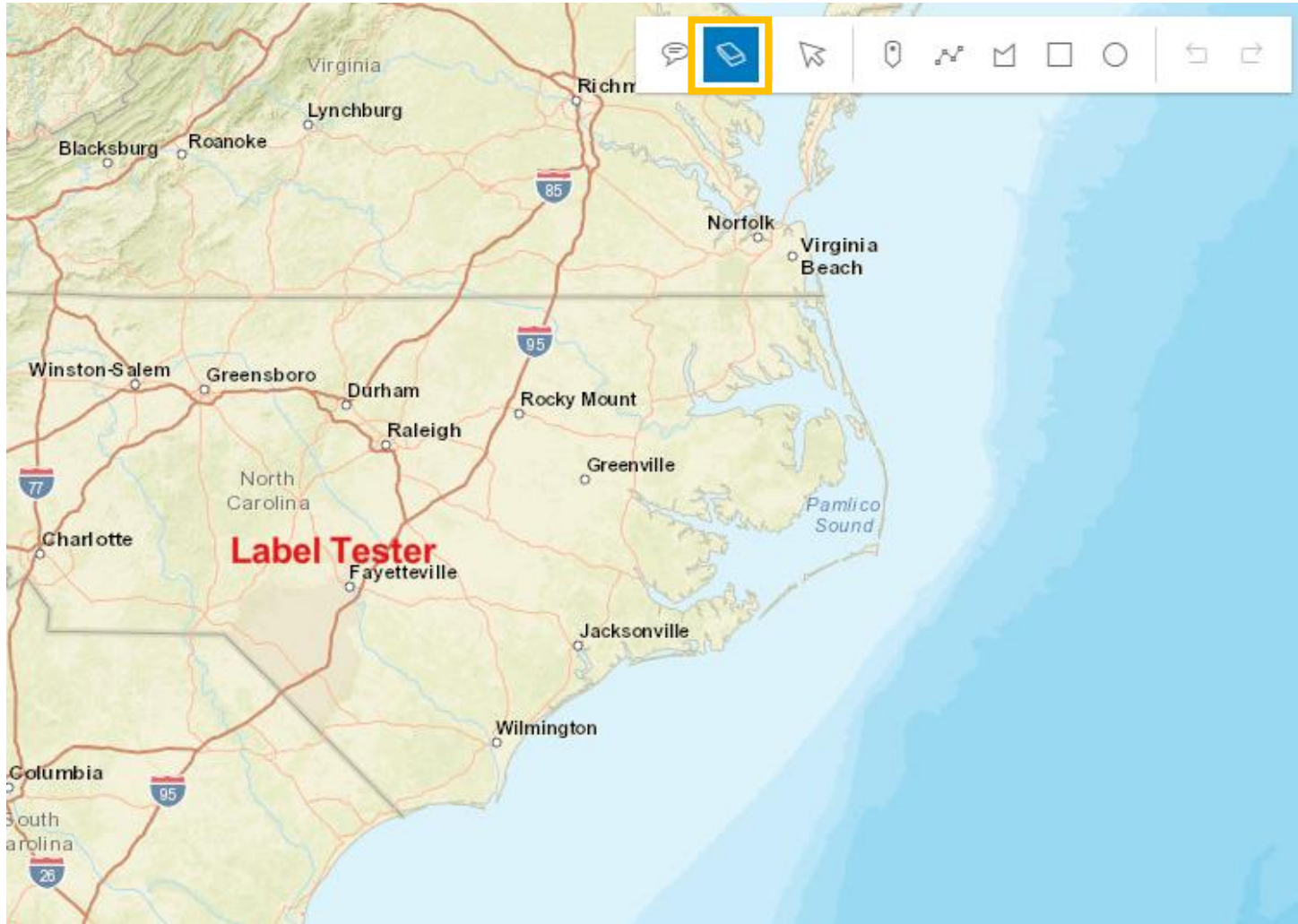
The map interface includes a toolbar with a 'Speech Bubble' icon (highlighted with a yellow box and a red circle '1') and a search bar at the bottom right. A red circle '2' highlights the 'Ok and Select Location' button in the dialog box. The map shows major cities like Raleigh, Durham, and Jacksonville, and geographical features like Pamlico Sound.


1.2 When you click on the **Speech Bubble** icon, a **Create Label** box appears where you can enter the Label's text, and select its color, angle, weight, and size.

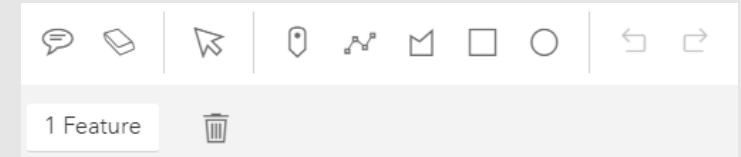
2 Once filled out, click on the **Ok and Select Location** button to click a location on the map to place the label.


Your labels will be added to the **Map Labels** layer on your table of contents.



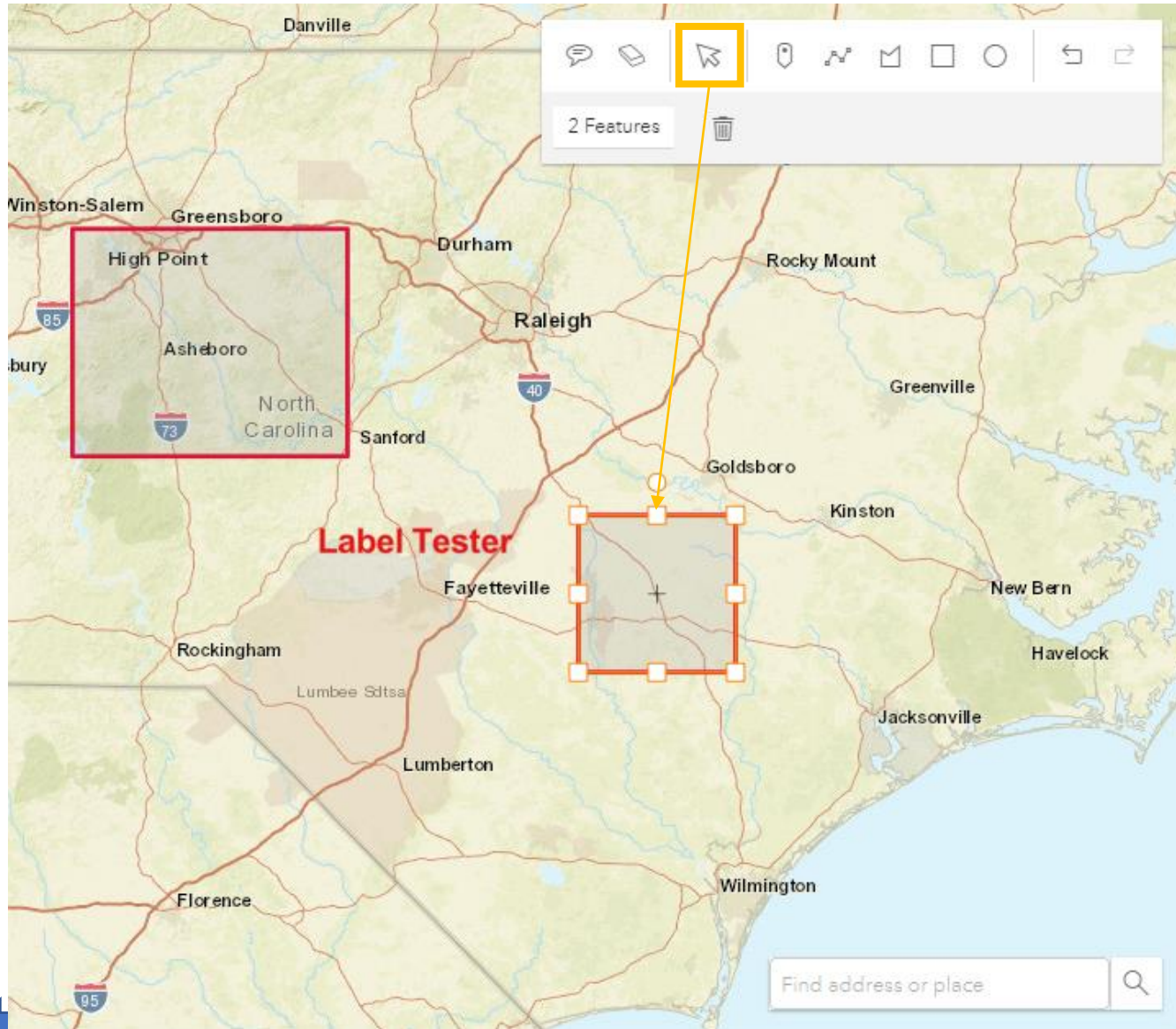


1.3 To **Remove** a label or image that you have placed on the map, click on the **Remove Label** button, indicated by the  icon, and select on the label or image in the map. The following menu extension will appear:



You can click “Delete” on your keyboard or click on the  icon.





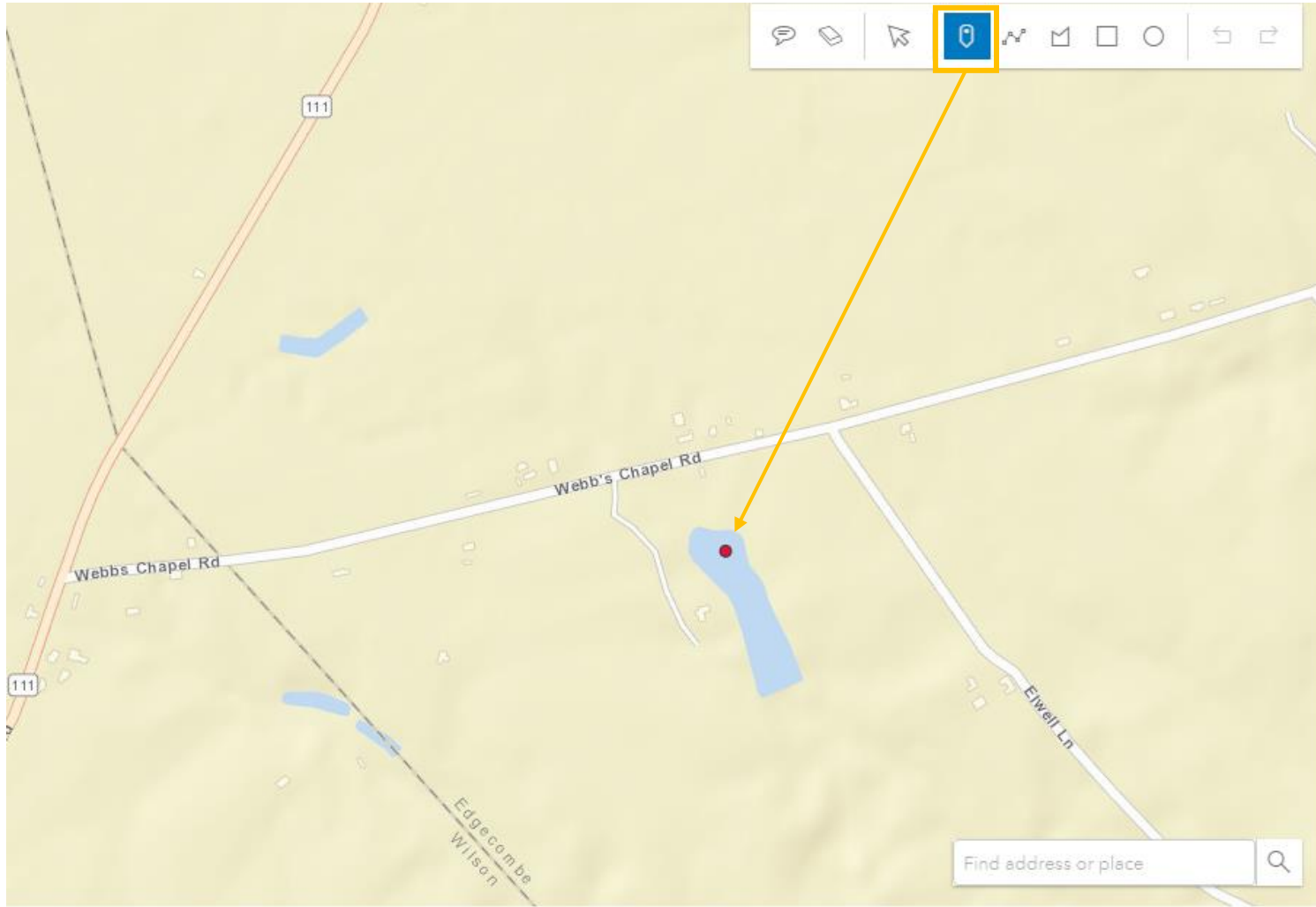
1.4 Use the **Select Feature** tool to move or reshape any feature drawn on the map. Click on the icon, then click on the feature. You can:

1. Shift it to the desired location
2. Reshape it by moving individual vertices
3. Rotate it by using the circle that appears above the shape




Remember, these shapes are not study areas and will not be used when generating reports or analyzing data. They will only display as images in the map.





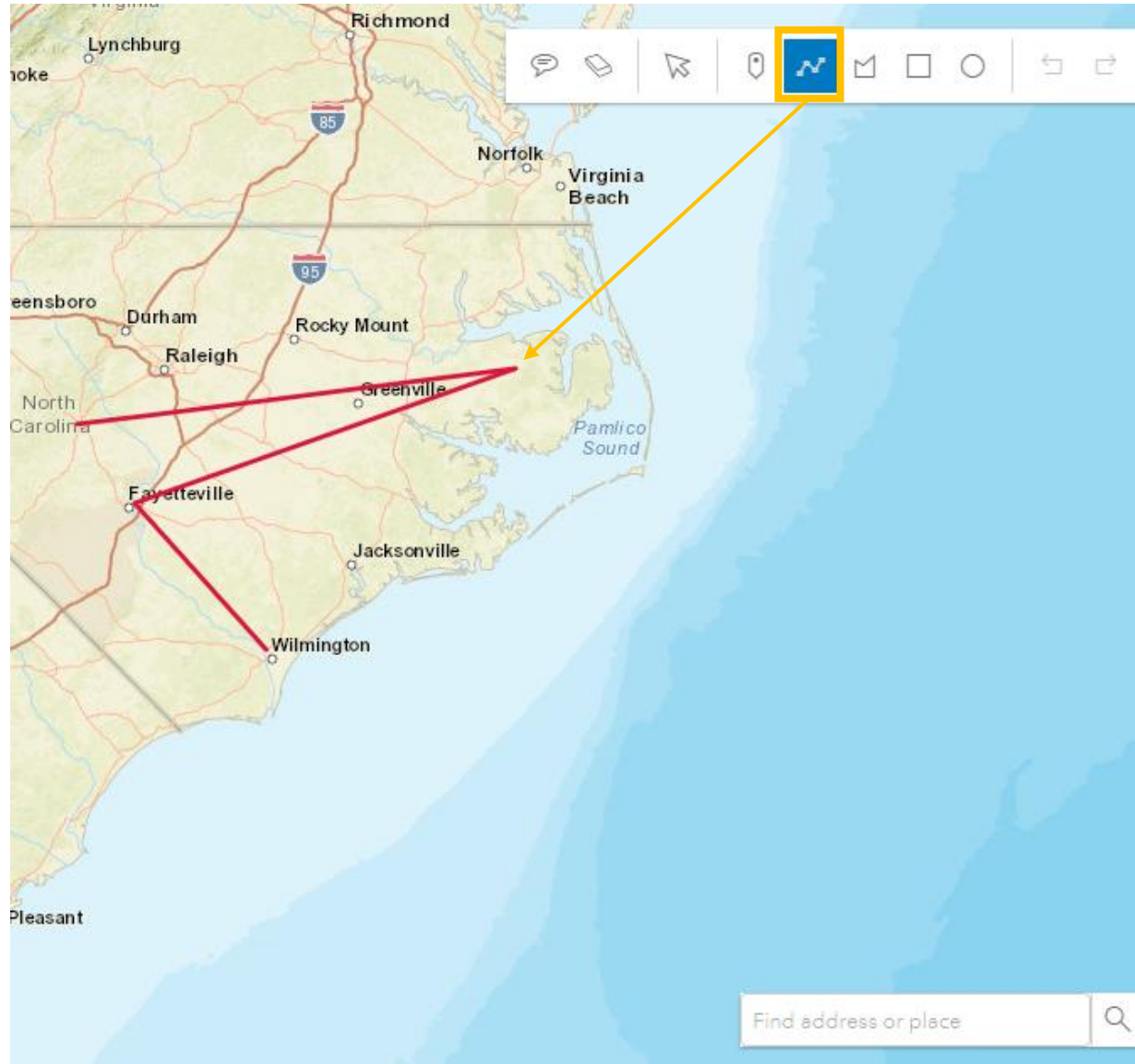
1.5 Use the **Point** tool to draw a dot anywhere on the map.

Once you place the point, you can move or delete it using the  icon.




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## 1.0 Draw: Draw a Polyline



1.6 Use the **Line** tool to draw a polyline anywhere on your map.

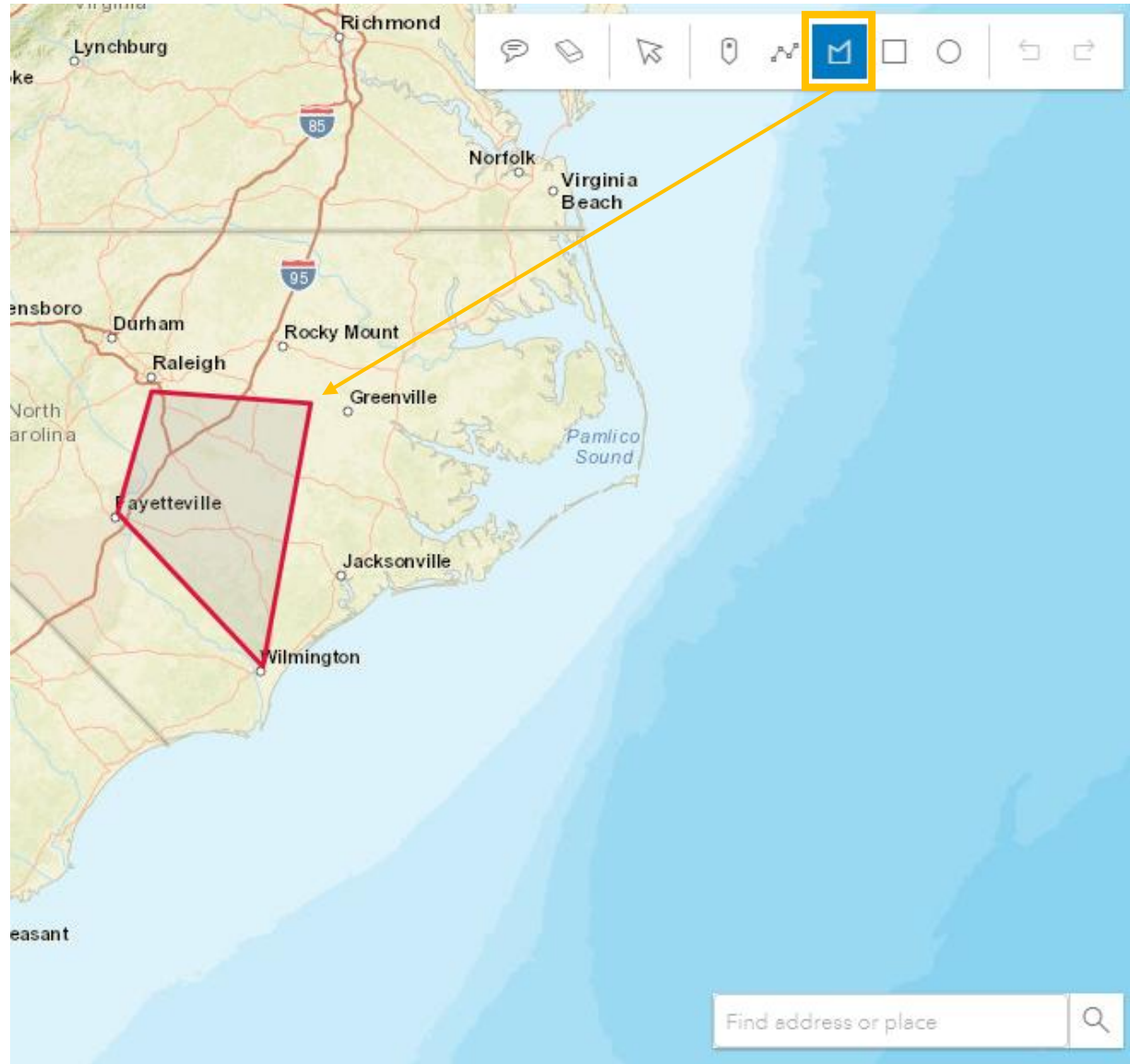
**Double-click** to finish drawing.

Once you place the point, you can move or delete it using the  icon.



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## 1.0 Draw: Draw a Polygon



1.7 Use the **Polygon** tool to draw a polygon anywhere on your map.

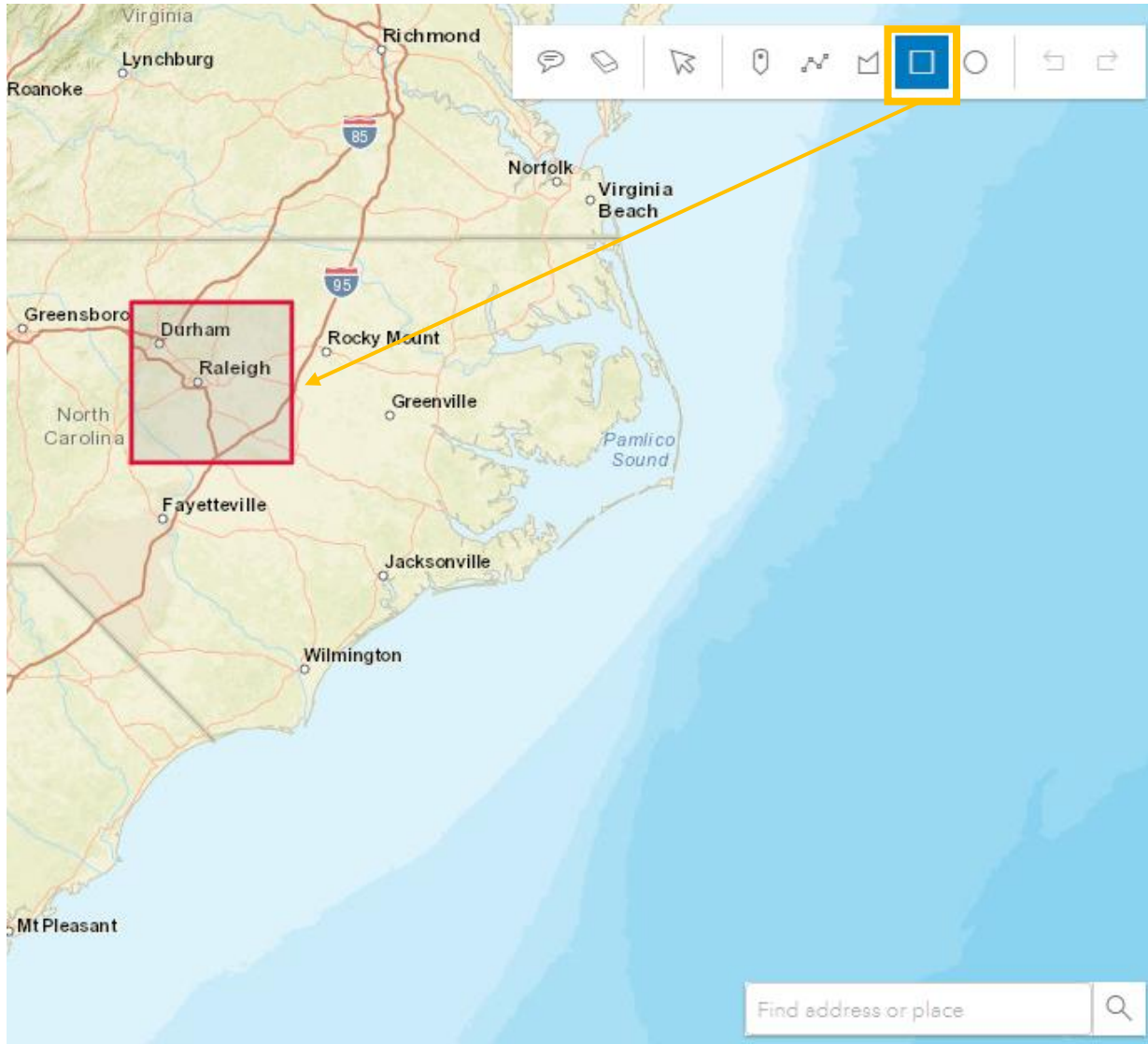
The polygon must have at a minimum three points but there is not a maximum number of points.

**Double-click** to finish drawing, the polygon will automatically complete to close the shape. Any double click after three points will complete the shape.

Once you place the point, you can move or delete it using the  icon.




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1.8 Use the **Rectangle** tool to draw a rectangle anywhere on your map.

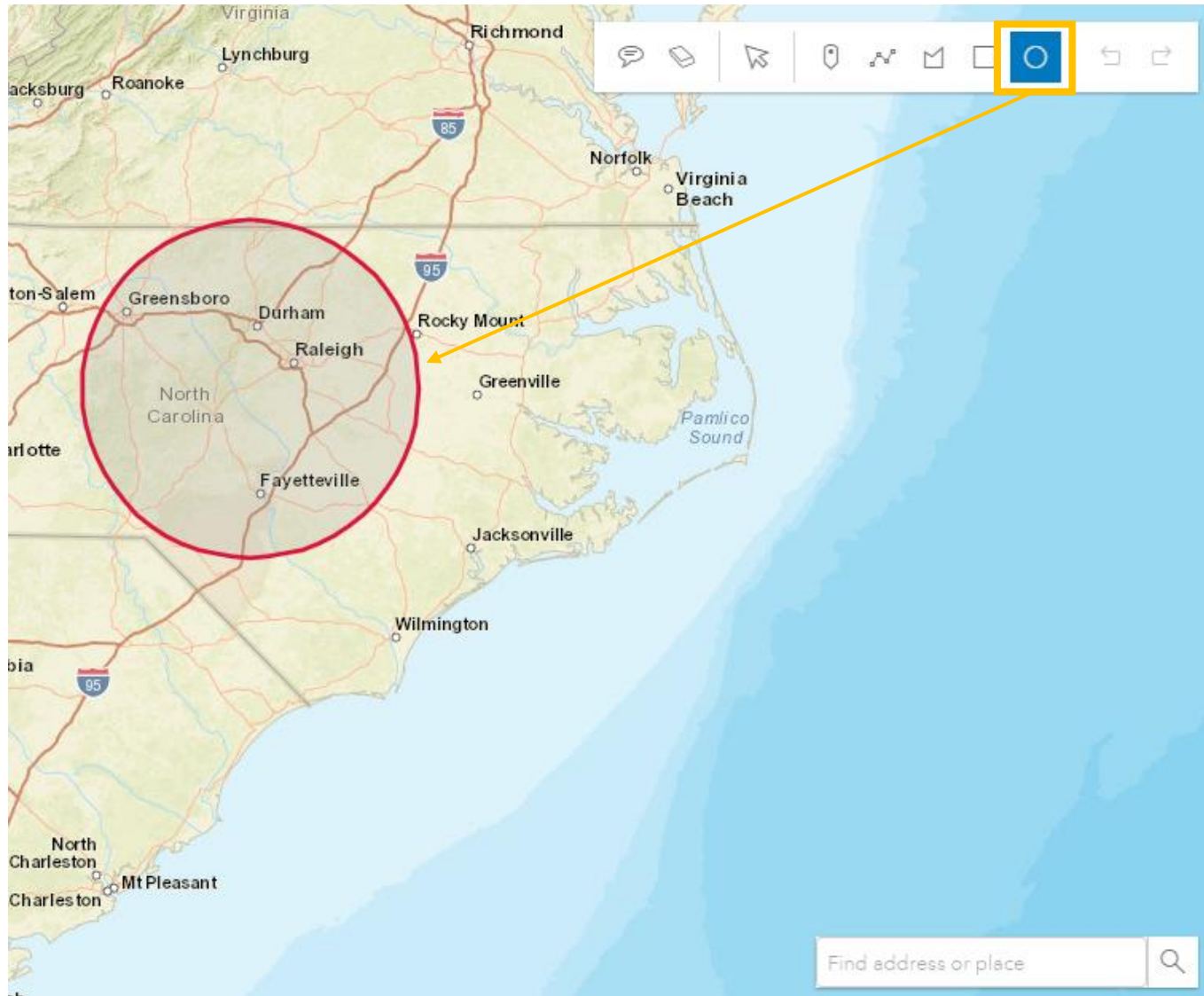
To begin the drawing, click on the map, hold the mouse button down, and drag in or out to control the size of the shape. **The first point becomes a corner point.**

To end the drawing, release the mouse button.

Once you place the point, you can move or delete it using the  icon.








1.9 Use the **Circle** tool to draw a circle anywhere on your map.

To begin the drawing, click on the map, hold the mouse button down, and drag in or out to control the size of the shape. **The first point becomes the center point.**

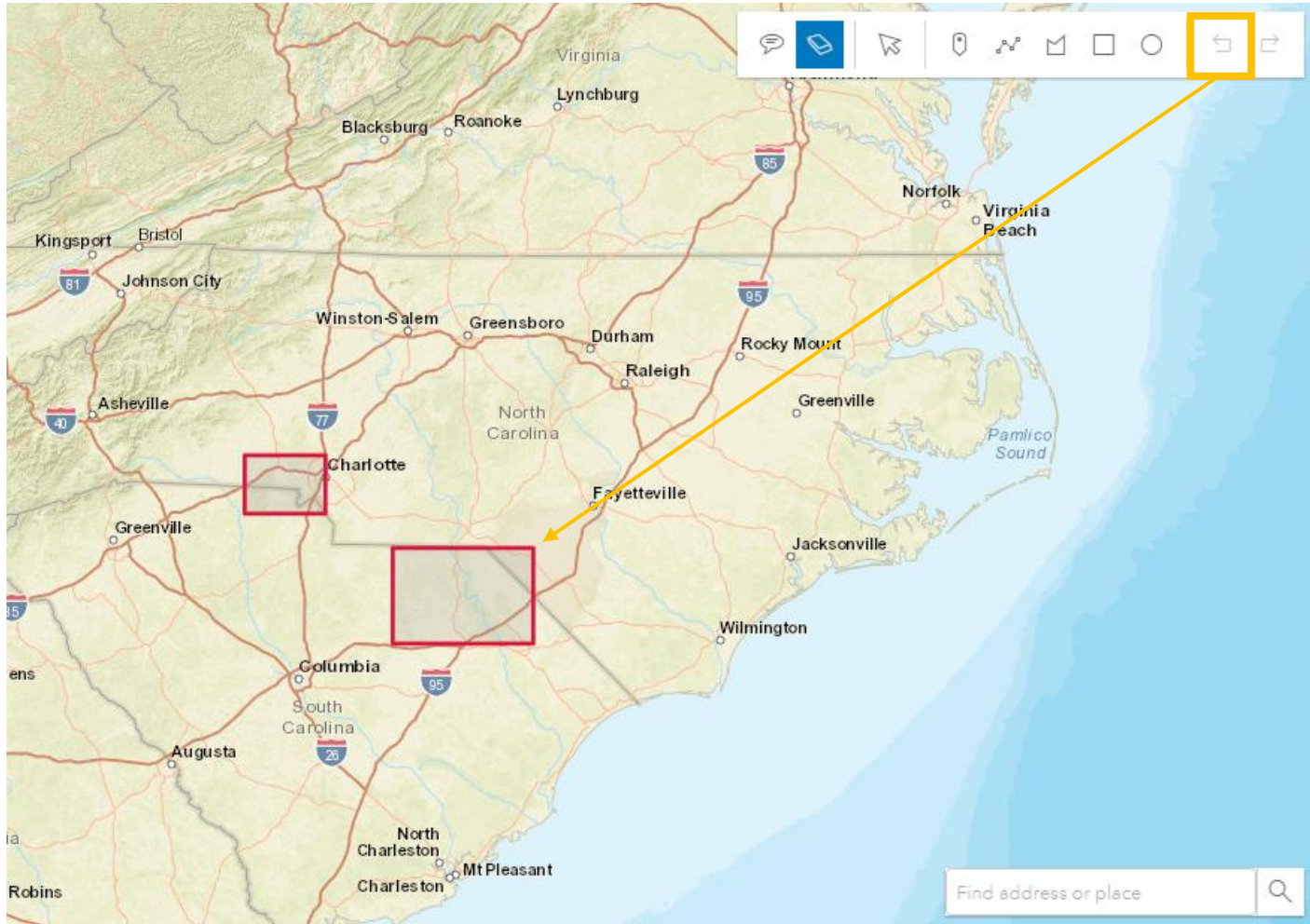
To end the drawing, release the mouse button.

Once you place the point, you can move or delete it using the  icon.



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# 1.0 Draw: Undo a Map Action



1.10 Use the **Undo** tool to undo a map operation. This works to undo actions involving resizing of shapes.

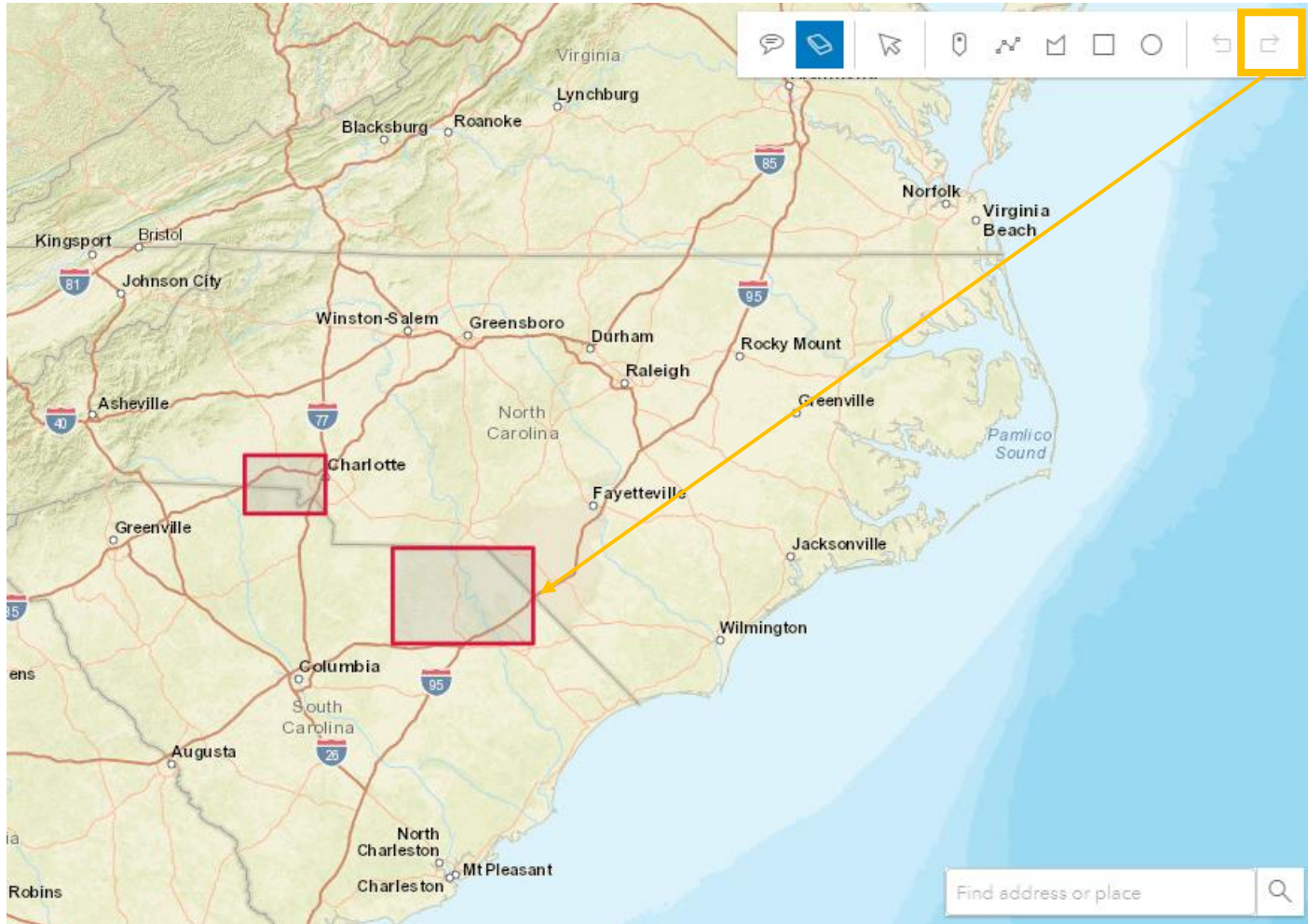
To undo creation of a shape, use the **Remove Label** function.



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# 1.0 Draw: Redo a Map Action



1.11 Use the **Redo** tool to redo a map operation. This works to redo an “undo” action involving resizing of shapes.




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The screenshot shows the ATLAS Search Tool interface. The map displays a distance of 316,977.52 feet. A legend on the left lists various RPOs (Regional Planning Organizations) with color-coded boundaries. The toolbar at the top includes icons for search, info, edit, print, and a minus sign. A 'New measurement' button is highlighted in blue. A dropdown menu for units is set to 'Feet'. A search bar at the bottom right contains the text 'Find address or place'.

2.1 Use this to measure distance between any two points on the map.

After you click the  icon, click the blue **New Measurement** button in the top right corner of the map.

1


Click on the map to start measuring. As you measure, the distance will be noted. To end your measurement, double click.

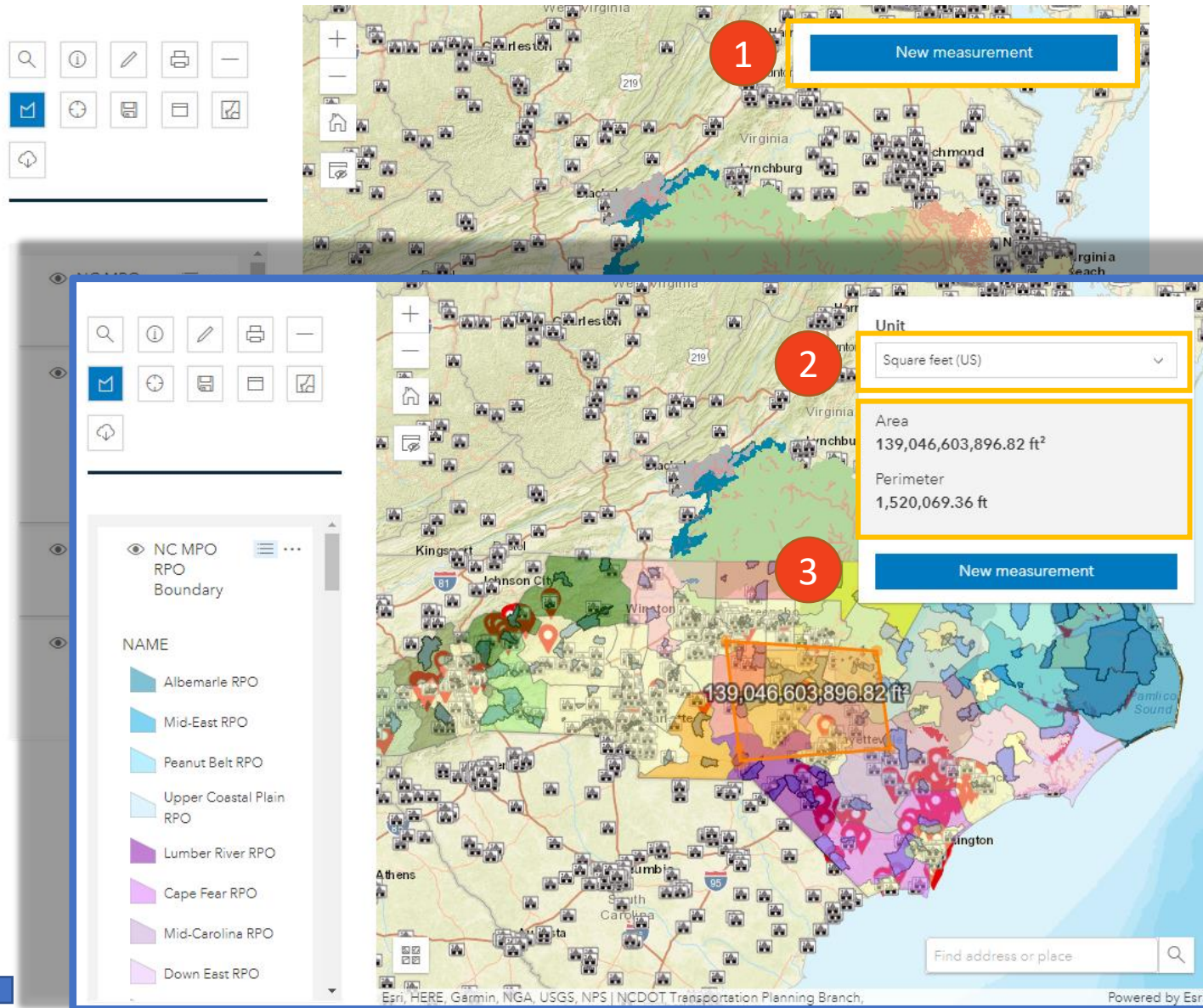
2

You can change the units using the dropdown menu.


3

Start a new measurement at any point using the New Measurement button. Keep in mind that this clears your last measurement.

To clear the measurement toolbar, click again on the  icon.



3.1 This tool works much like the previous one to measure distance, but measures an area.

After you click the  icon, click the blue **New Measurement** button in the top right corner of the map.

Click on the map to start measuring. As you measure, the distance will be noted. To end your measurement, double click.

You can change the units using the dropdown menu.

You can start new measurement at any point using the New Measurement button. Keep in mind that this clears your last measurement.



The icon to measure area is the same as the icon used to draw a polygon in the draw tools.

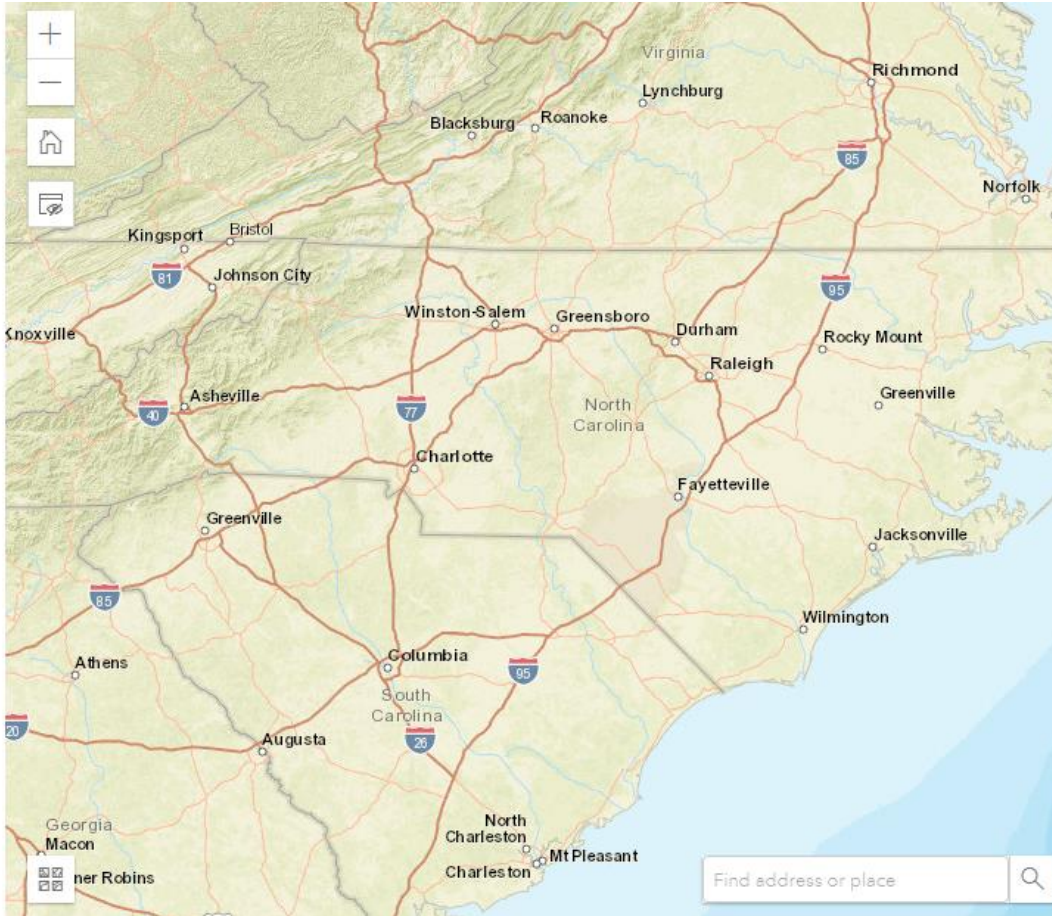
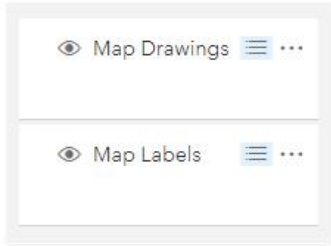
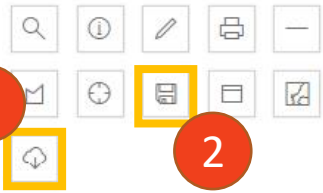







# Advancing Transportation through Linkages, Automation, and Screening (ATLAS) Training Courses

[Download Layers or Print Map](#)

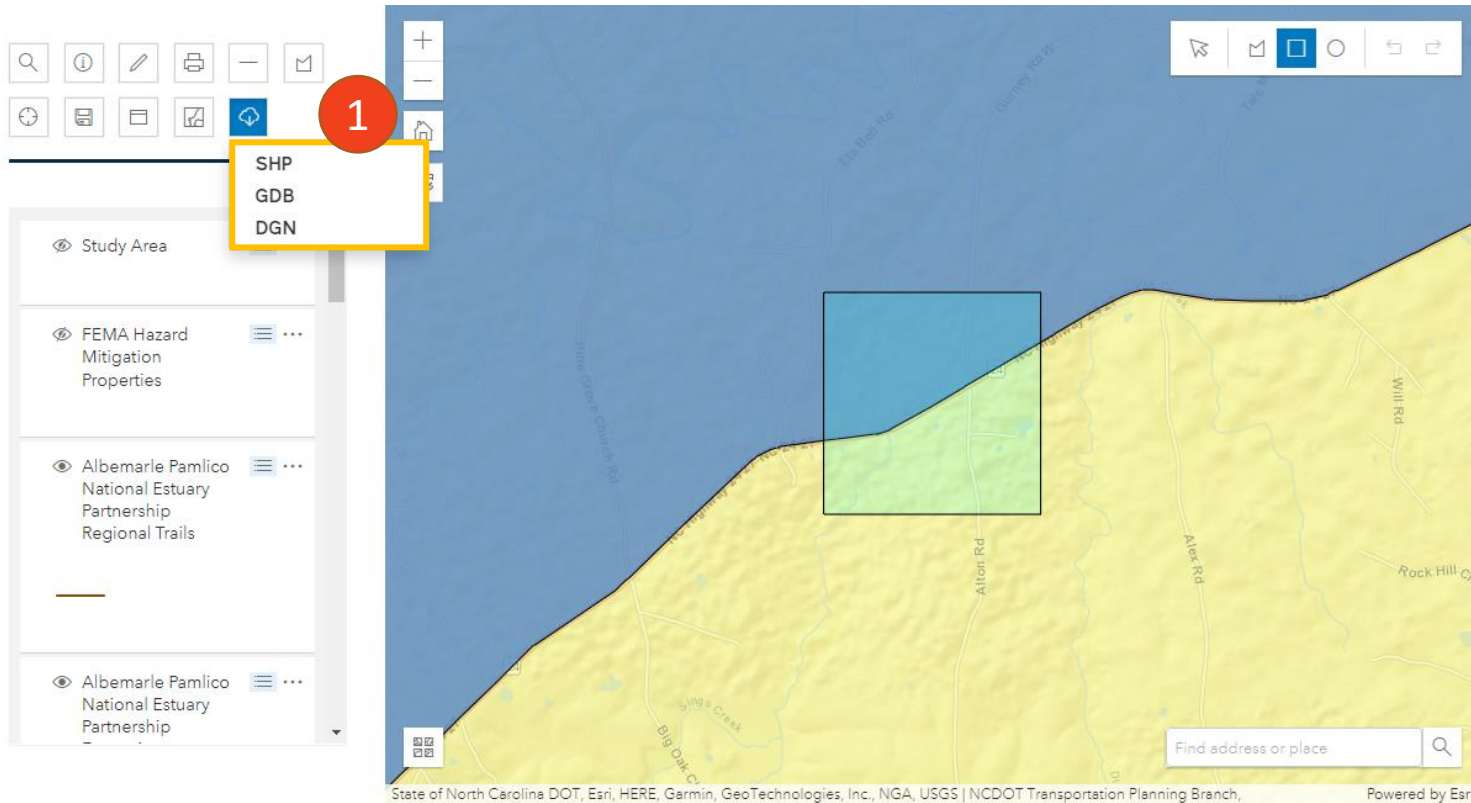


0.1 There are two options in the Download Layers or Print Map function.


*More information about these options are on the following slides.*

1 ▶ Download Data 


2 ▶ Print Map 



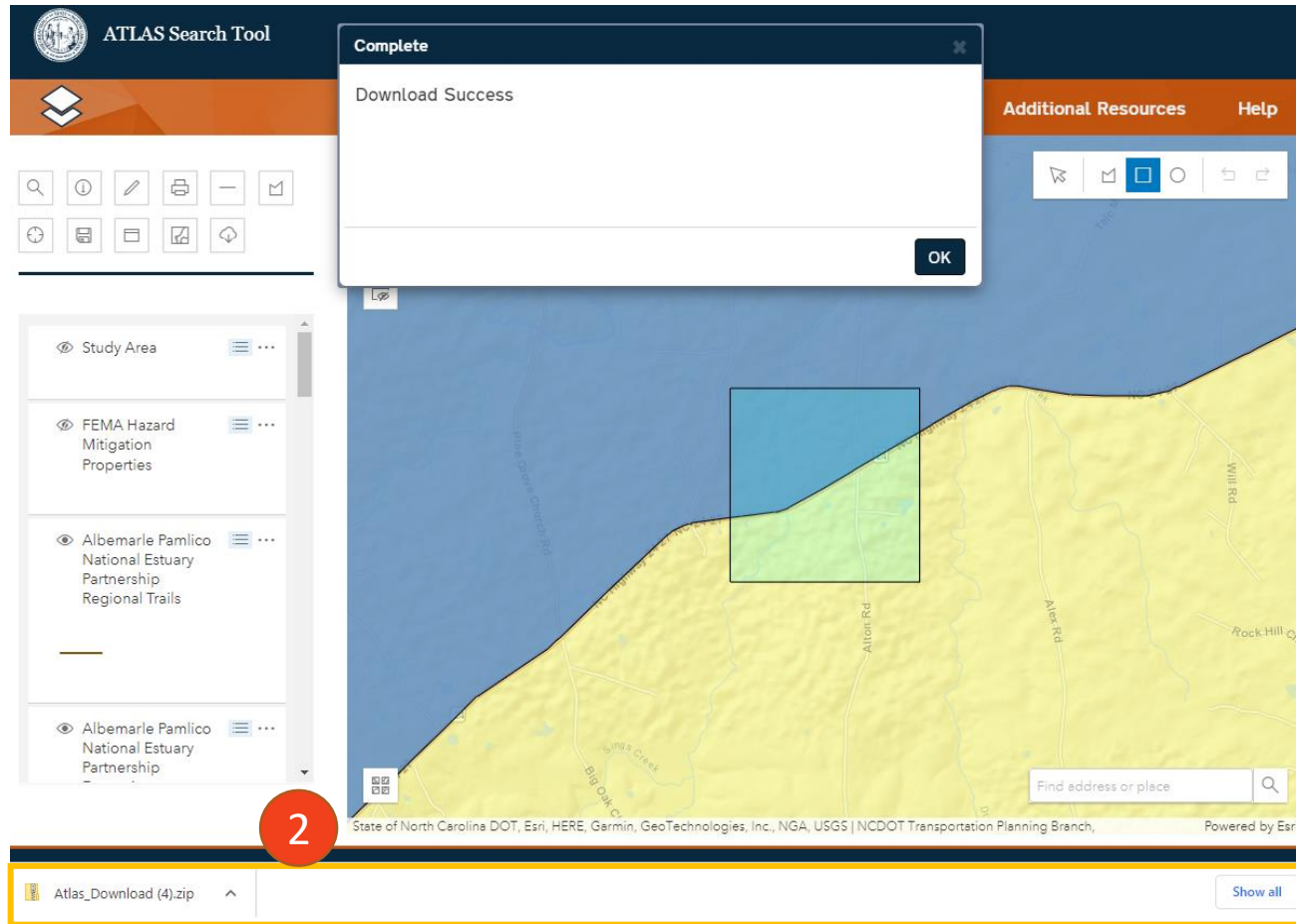
1.1 The **Download Data** tool allows you to download your data, clipped to your study area, in one of the three available formats (SHP, GDB, or DGN).

1 Select the  icon and choose a file format.



Labels and shapes drawn onto the map will not affect the area used to clip the data layers. The layers are clipped only by the **study area** that you have uploaded or drawn using the  icon.





1.2 Once you select your file type and your map has downloaded, select **OK**.

Once downloaded, the file will appear at the bottom of your browser page, as well as in your computer's download folder.



The screenshot shows the ATLAS Search Tool interface. On the left, there is a list of layers including National Flood Hazard Layer General Structures, Political Jurisdictions, Flood Hazard Boundaries, FIRM Panels, Gages, and LOMAS. The main area displays a map of Virginia with various cities and roads. An 'Export' dialog box is open on the right, with a yellow box highlighting it. The dialog box has three numbered callouts: 1 points to the Print icon in the toolbar, 2 points to the Export dialog box, and 3 points to the 'Export' button at the bottom of the dialog. The dialog box contains options for 'Layout' (Map only), 'Title' (Title of file), 'Page setup' (Letter ANSI A landscape), and 'File format' (JPG). There is also an 'Advanced options' link and an 'Exported files' section.

2.1 To **Print a Map**, select the **Print** icon.

1

On the right side of your screen, you'll see a box where you can enter your **Title**, **Page setup**, and **File format**.

2

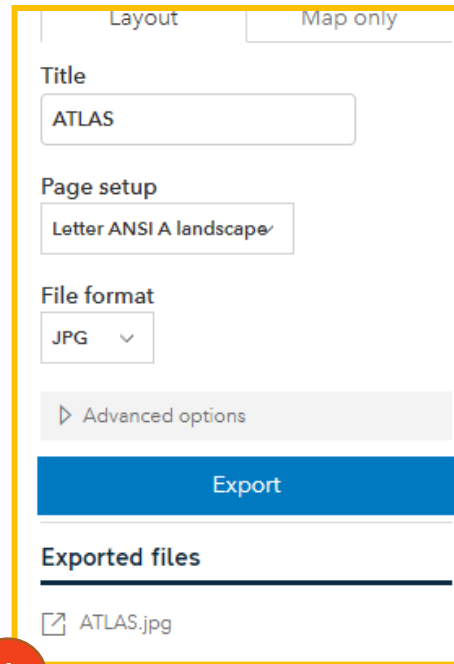
To finish, click **Export**.

3



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The screenshot shows a web interface for exporting a map. At the top, there are two tabs: 'Layout' and 'Map only'. Below the tabs, there are three sections: 'Title' with a text input field containing 'ATLAS'; 'Page setup' with a dropdown menu showing 'Letter ANSI A landscape'; and 'File format' with a dropdown menu showing 'JPG'. Below these sections is a button labeled 'Advanced options'. A large blue button labeled 'Export' is positioned below the 'Advanced options' button. At the bottom of the interface, there is a section titled 'Exported files' which contains a single entry: a small icon of a document with a checkmark and the text 'ATLAS.jpg'. A red circle with the number '1' is overlaid on the bottom left corner of the screenshot.

2.2 Once exported, the file will appear under **Exported files**.

1



Clicking “Export” does not automatically download to the user’s downloaded folder. To access the downloaded files, click the “Exported files” link and download individual files to your computer.

1



# SE.00

## A Guide to the ATLAS Search Tool

You have now completed this module.

For additional questions, email  
[ATLAS@ncdot.gov](mailto:ATLAS@ncdot.gov)

### Module SE.00 Reference Table

#	Step	Slides
1	Log into ATLAS Search Tool	5-19
2	Zoom into Area of Interest	23-28
3	Select Layers	29-41
4	Add Labels/Images and Measure	42-56
5	Download Layers and Print Map	57-62