

Using ArcGIS Online to post data for National Trails



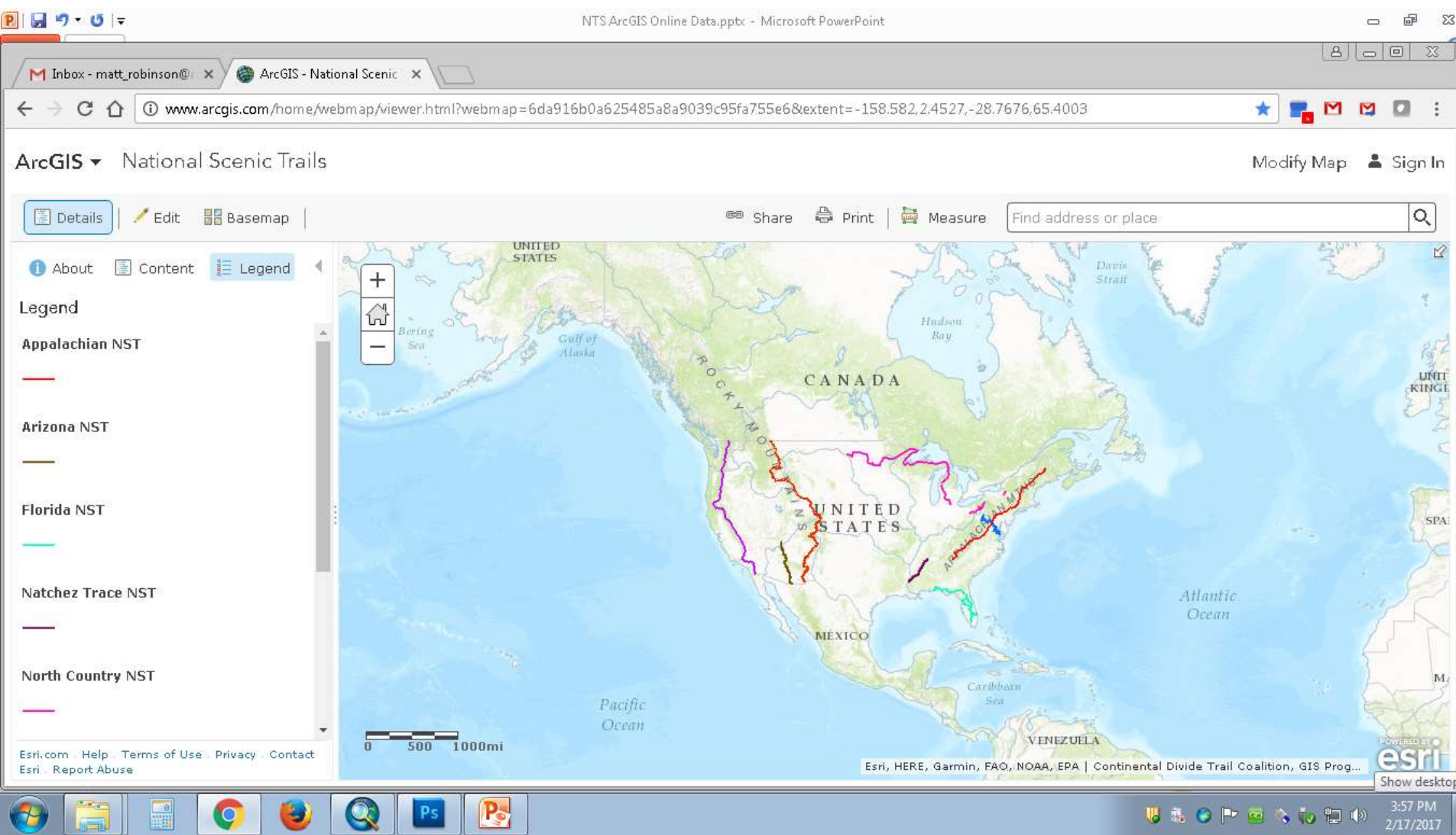
Current Status

- Most National Trails are already publishing some version of their centerline on ArcGIS Online.
- Multiple depictions of different trails exist out there though, making it hard to identify which is the 'official' version and/or the most up-to-date version.
- Information associated with each data set also varies in terms of spatial accuracy, map scale, attributes, and associated information available.
- Some are shared with the public, some are only shared internally (with select staff)
- Some trail data is fully downloadable, others are not.
- Some data contains FGDC compliant metadata, others do not.

Our Vision

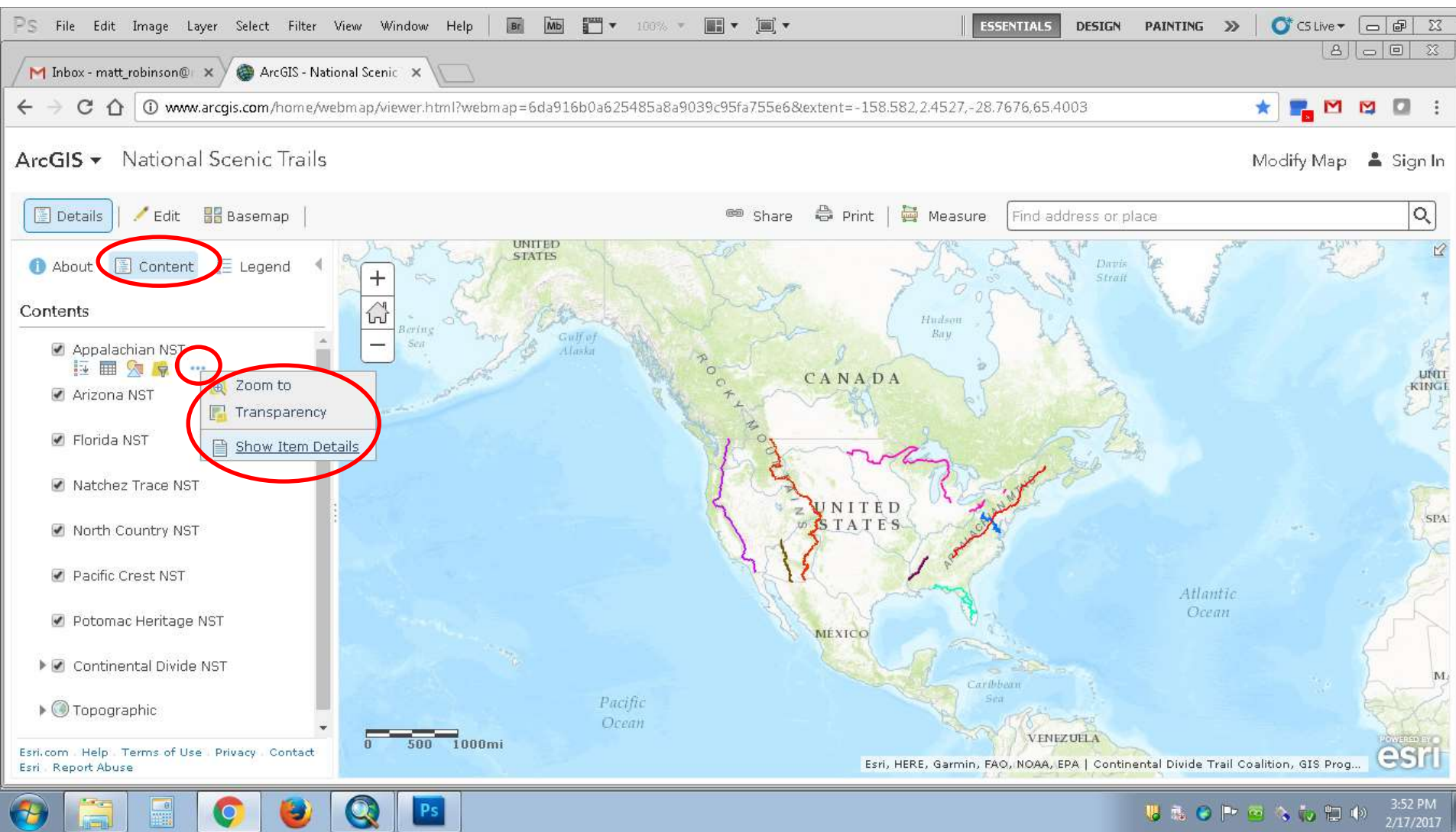
- We think that ArcGIS Online is a great platform for sharing geographic information about National Trails with managers, partners, and the public.
- ArcGIS Online can be used, not only to share individual trail data, but to bring all National Trail data together.
- If setup correctly, multiple organizations can access trail data on ArcGIS Online without any one person or entity having to manage all the data, request periodic updates, or deal with the headaches of 'merging' it together to form one dataset.
- Multiple organizations may link to the data without having to go to one specific organization or one specific host (website, data portal, etc) to acquire the data.
- Data hosted on ArcGIS Online is dynamic, meaning any updates made to the data are immediately 'live' (shown), and can continue to be managed exclusively by each trail entity.

Some Existing National Trail data on ArcGIS Online



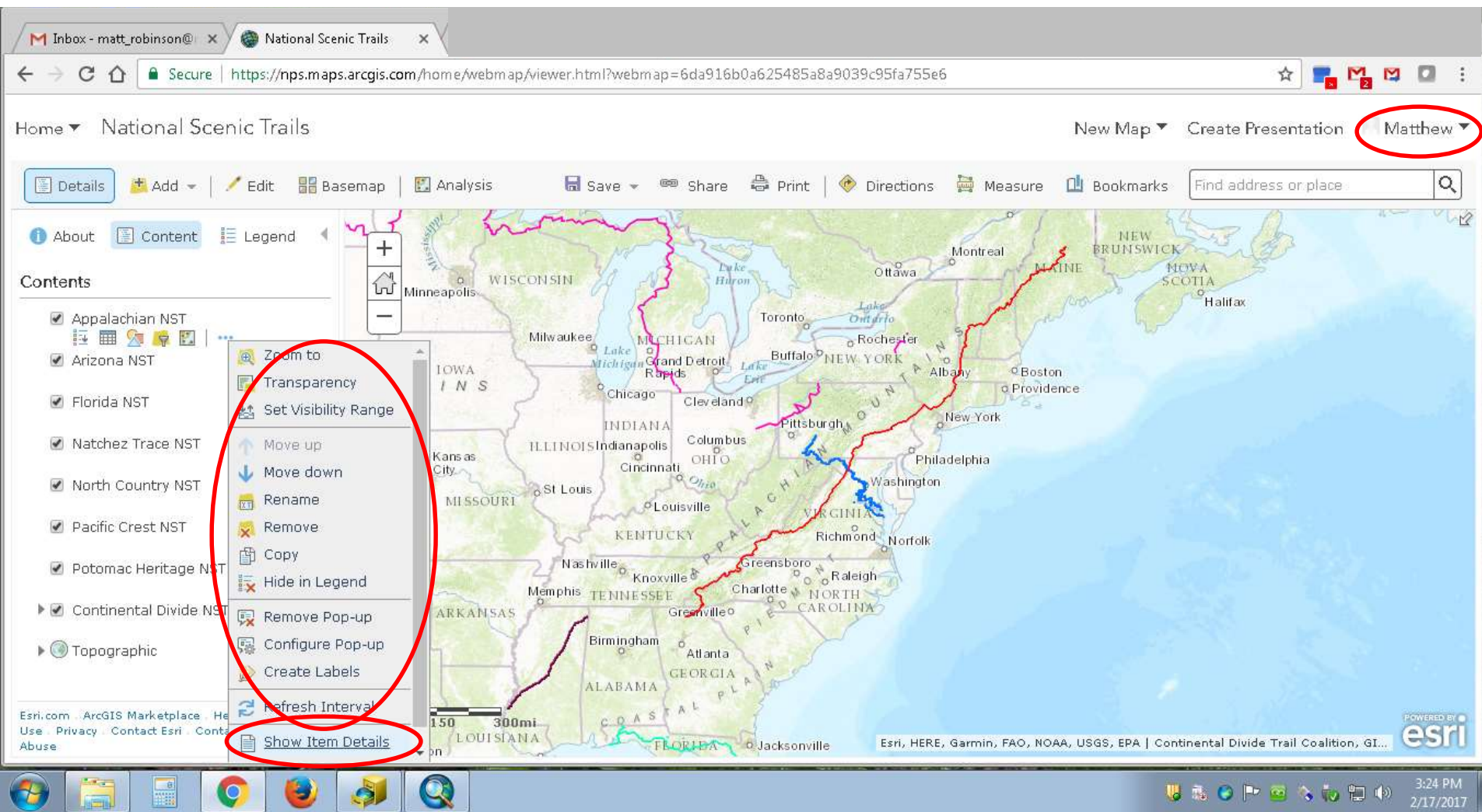
Each trail depicted here is stored separately on ArcGIS Online and managed separately by its respective trail managers

Some Existing National Trail data on ArcGIS Online



Information about each trail may be viewed separately

Some Existing National Trail data on ArcGIS Online



If actually logged into ArcGIS Online (with an ESRI account – either organizational or free) additional functionality is available

Information associated with the Appalachian Trail

Ps File Edit Image Layer Select Filter View Window Help 66.7


Spring 2017 MA-RPC Me x ArcGIS - National Scenic x Appalachian National Sc x

www.arcgis.com/home/item.html?id=45075643620e47b2a4b6072b26619b51

ArcGIS Features Plans Gallery Map Scene Help Sign In

Appalachian National Scenic Trail

Overview Data Visualization




Official depiction of the Appalachian National Scenic Trail centerline as of 03-11-2016
by MRobinson@nps.gov
Last Modified: November 28, 2016
Feature Layer

[Open in Map Viewer](#)

[Open in Scene Viewer](#)

[Open in ArcGIS Desktop](#)

Description



The Appalachian National Scenic Trail (A.T.) is a footpath over 2,180 miles in length that traverses the Appalachian

Details

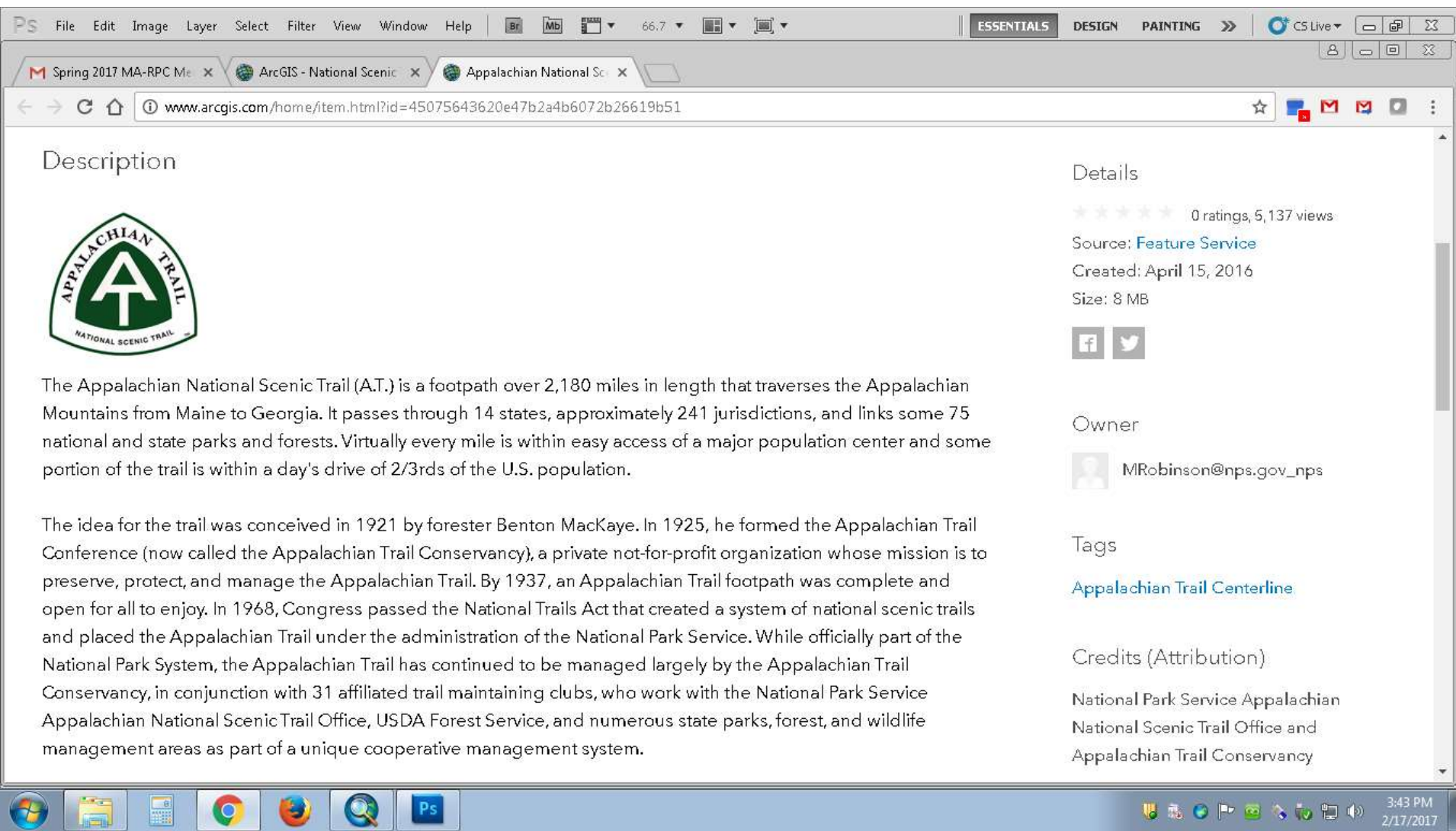
0 ratings, 5,137 views
Source: [Feature Service](#)
Created: April 15, 2016
Size: 8 MB

[Facebook](#) [Twitter](#)

Windows taskbar: Start button, File Explorer, Calculator, Chrome, Firefox, Search, Photoshop, System tray with date/time 3:42 PM 2/17/2017.


Data posted includes a name, date last modified, and type of layer ...

Information associated with the Appalachian Trail



The screenshot shows a web browser window with the ArcGIS online interface. The browser's address bar displays the URL: www.arcgis.com/home/item.html?id=45075643620e47b2a4b6072b26619b51. The page is titled "Appalachian National Scenic Trail" and features a description, details, and owner information.

Description



The Appalachian National Scenic Trail (A.T.) is a footpath over 2,180 miles in length that traverses the Appalachian Mountains from Maine to Georgia. It passes through 14 states, approximately 241 jurisdictions, and links some 75 national and state parks and forests. Virtually every mile is within easy access of a major population center and some portion of the trail is within a day's drive of 2/3rds of the U.S. population.

The idea for the trail was conceived in 1921 by forester Benton MacKaye. In 1925, he formed the Appalachian Trail Conference (now called the Appalachian Trail Conservancy), a private not-for-profit organization whose mission is to preserve, protect, and manage the Appalachian Trail. By 1937, an Appalachian Trail footpath was complete and open for all to enjoy. In 1968, Congress passed the National Trails Act that created a system of national scenic trails and placed the Appalachian Trail under the administration of the National Park Service. While officially part of the National Park System, the Appalachian Trail has continued to be managed largely by the Appalachian Trail Conservancy, in conjunction with 31 affiliated trail maintaining clubs, who work with the National Park Service Appalachian National Scenic Trail Office, USDA Forest Service, and numerous state parks, forest, and wildlife management areas as part of a unique cooperative management system.

Details


0 ratings, 5,137 views

Source: [Feature Service](#)

Created: April 15, 2016

Size: 8 MB

Owner

 MRobinson@nps.gov_nps

Tags

[Appalachian Trail Centerline](#)

Credits (Attribution)

National Park Service Appalachian
National Scenic Trail Office and
Appalachian Trail Conservancy

A description of the data can also be entered

Information associated with the Appalachian Trail

The screenshot shows a web browser window displaying an ArcGIS item page. The browser's address bar shows the URL: www.arcgis.com/home/item.html?id=45075643620e47b2a4b6072b26619b51. The page content includes a paragraph about the Appalachian Trail, a section for 'Credits (Attribution)' listing the National Park Service, and a 'URL' section with a link to the service: <http://services1.arcgis.com/fBc8E>. Below this, a 'Layers' section shows the layer name 'Appalachian_Trail_Centerline_031116' with an 'Open In' dropdown menu set to 'Service URL'. A tooltip for 'Open in Map Viewer' is visible. The browser's taskbar at the bottom shows various application icons and the system clock indicating 3:43 PM on 2/17/2017.

Appalachian Trail Centerline

Credits (Attribution)

National Park Service Appalachian
National Scenic Trail Office and
Appalachian Trail Conservancy

URL <http://services1.arcgis.com/fBc8E> View

Layers

Appalachian_Trail_Centerline_031116

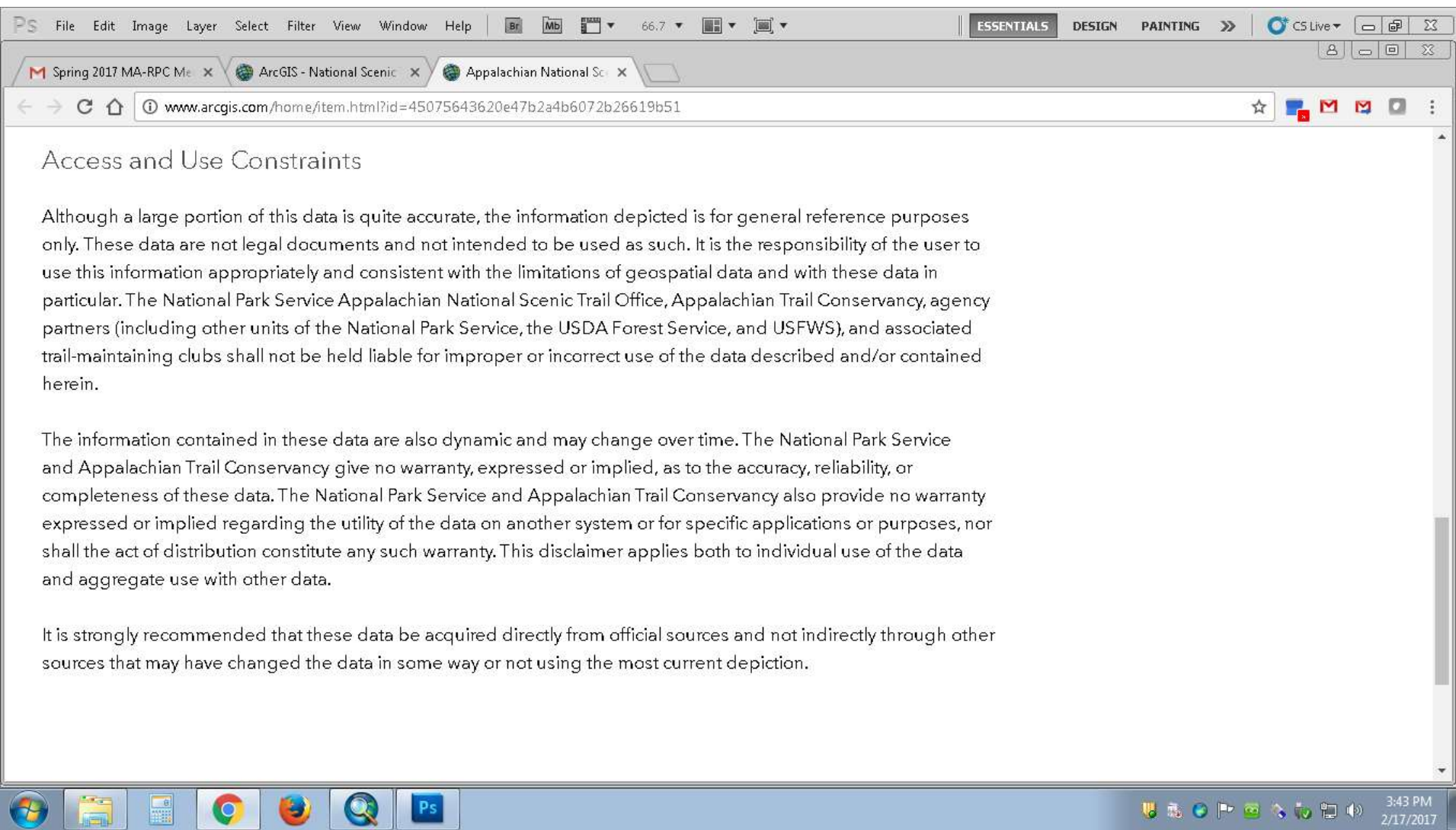
Open In Service URL

Open in Map Viewer

www.arcgis.com/home/webmap/viewer.html?useExisting=1&layers=45075643620e47b2a4b6072b26619b51&layerId=0

A link to the actual layer is included

Information associated with the Appalachian Trail



Access or Use Constraints may also be associated with the data

Information associated with the Appalachian Trail

NTS ArcGIS Online Data.pptx - Microsoft PowerPoint


Inbox - matt_robinson@ x ArcGIS - National Scenic x Appalachian National Sc x

www.arcgis.com/home/item.html?id=45075643620e47b2a4b6072b26619b51

ArcGIS Features Plans Gallery Map Scene Help Sign In

Appalachian National Scenic Trail

Overview Data Visualization




Official depiction of the Appalachian National Scenic Trail centerline as of 03-11-2016
by [MRobinson@nps.gov_nps](#)
Last Modified: November 28, 2016
Feature Layer

[Open in Map Viewer](#)

[Open in Scene Viewer](#)

[Open in ArcGIS Desktop](#)

Description



Details

0 ratings, 5,141 views
Source: [Feature Service](#)
Created: April 15, 2016
Size: 8 MB

item.pitem item (10).pitem item (9).pitem Show all

Windows taskbar: 4:07 PM 2/17/2017

Data can be opened in a Map Viewer, Scene Viewer, or ArcGIS Desktop

Information associated with the North Country Trail

The screenshot shows a web browser window with the title "North Country Trail". The address bar displays the URL: <https://nps.maps.arcgis.com/home/item.html?id=fa2c079c78f64b868f7fe9d4e23ec513#overview>. The page has a blue header with the title "North Country Trail" and three tabs: "Overview", "Data", and "Visualization". The "Overview" tab is selected.

On the left, there is a map thumbnail showing the trail route across the northern United States. Below the map is a star icon and the text "Add to Favorites".

The main content area contains the following text:

- This layer shows the portion of the North Country trail that is available from that organization as a GIS layer
- by [FTKare](#)
- Last Modified: May 23, 2013
- Feature Layer

On the right side, there are four buttons:

- Open in Map Viewer
- Open in Scene Viewer
- Open in ArcGIS Desktop
- Share

Below the buttons, there is a "Details" section:

- ★★★★★ 1 ratings, 4,752 views
- Source: [Feature Service](#)
- Created: May 23, 2013
- Size: 9 MB

At the bottom of the details section, there are icons for Facebook and Twitter.

The browser's taskbar at the bottom shows various application icons, including Windows Explorer, Google Chrome, and Photoshop. The system clock in the bottom right corner indicates the time is 3:30 PM on 2/17/2017.

This is another example of some posted data

Information associated with the North Country Trail

Ps File Edit Image Layer Select Filter View Window Help 66.7

ESSENTIALS DESIGN PAINTING >> CS Live


Inbox - matt_robinson@ National Scenic Trails Appalachian National Sc North Country Trail

https://nps.maps.arcgis.com/home/item.html?id=fa2c079c78f64b868f7fe9d4e23ec513#overview

Description

The North Country Trail (NCT) connects America's red plaid nation, wandering 4600 miles through America's rugged northern heartlands. Stretching across seven states, this longest National Scenic Trail is brought to local communities through the dedication and hard work of volunteers. From New York to North Dakota, North Country Trail hikers can find adventure right nearby. While only a few have attempted to thru-hike the whole trail in one shot, thousands find their way onto a section of the NCT each year. Spring, summer, fall or winter, the trail offers something for everyone. Winter camping and snowshoeing, long-distance trail running, a saunter through quiet spring meadows or vineyards, crossing salmon-filled rivers, a weekend with the grandkids.... you can find what you're looking for on the North Country Trail, and right nearby. This trail can be rugged and welcoming, remote and festive.

For a direct link to download the NCT data, see <http://northcountrytrail.org/trail/data/>



Details

★★★★★ 1 ratings, 4,752 views


Source: [Feature Service](#)

Created: May 23, 2013

Size: 9 MB

[f](#) [t](#)

Owner

 FTKaren

Tags

[Ohio](#), [New York State](#), [Michigan](#), [Pennsylvania](#), [North Country Trail](#), [hiking](#)

Credits (Attribution)

No acknowledgements.

Windows taskbar: 3:30 PM 2/17/2017

This is another example of some posted data

Information associated with the North Country Trail

The screenshot shows a web browser window with the title "North Country Trail". The address bar displays the URL: <https://nps.maps.arcgis.com/home/item.html?id=fa2c079c78f64b868f7fe9d4e23ec513#overview>. The main content area features a map of the North Country Trail, which is a red line winding through the Great Lakes region. A logo for the "NORTH COUNTRY NATIONAL SCENIC TRAIL" is overlaid on the map. The logo is a shield shape with a blue background and a yellow star. To the right of the map, there is a sidebar with the following information:

- Owner:** FTKaren
- Tags:** Ohio, New York State, Michigan, Pennsylvania, North Country Trail, hiking
- Credits (Attribution):** No acknowledgements.
- URL:** <https://services.arcgis.com/jDGuK...> (with a "View" button)

Below the map, there is a "Layers" section with a list of layers. The first layer is "North_Country_Trail", which has a dropdown menu set to "Open In" and a "Service URL" button. Below this, there is a button labeled "Open in Map Viewer". At the bottom of the browser window, the address bar shows the URL: <https://nps.maps.arcgis.com/home/webmap/viewer.html?useExisting=1&layers=fa2c079c78f64b868f7fe9d4e23ec513&layerId=0>. The Windows taskbar at the bottom shows the time as 3:31 PM on 2/17/2017.

This is another example of some posted data

Information associated with the North Country Trail

The screenshot shows a web browser window displaying the North Country Trail page on the ArcGIS Online platform. The browser's address bar shows the URL: <https://nps.maps.arcgis.com/home/item.html?id=fa2c079c78f64b868f7fe9d4e23ec513#overview>. The page has a navigation bar with links: Home, Gallery, Map, Scene, Groups, My Content, and My Organization. The main header is "North Country Trail" with tabs for Overview, Data, and Visualization. The Overview tab is active, showing a map of the North Country Trail and a description. The description states: "This layer shows the portion of the North Country trail that is available from that organization as a GIS layer by FTKaren. Last Modified: May 23, 2013." Below the description is a "Description" section with text about the trail. On the right side, there are four buttons: "Open in Map Viewer", "Open in Scene Viewer", "Open in ArcGIS Desktop", and "Share". The "Open in Map Viewer" and "Open in ArcGIS Desktop" buttons are circled in red. The "Open in Map Viewer" button has a dropdown arrow. The "Open in ArcGIS Desktop" button is also circled in red. The "Share" button is at the bottom. The "Details" section on the right shows a star rating of 4.5, 1 rating, and 4,758 views. The source is "Feature Service", created on May 23, 2013, and is 9 MB in size. The Windows taskbar at the bottom shows various application icons and the system clock indicating 3:31 PM on 2/17/2017.

Home Gallery Map Scene Groups My Content My Organization

North Country Trail

Overview Data Visualization

This layer shows the portion of the North Country trail that is available from that organization as a GIS layer

by FTKaren

Last Modified: May 23, 2013

Feature Layer

★ Add to Favorites

Description

The North Country Trail (NCT) connects America's red plaid nation, wandering 4600 miles through America's rugged northern heartlands. Stretching across seven states, this longest National Scenic Trail is brought to local communities through the dedication and hard work of volunteers. From New York to North Dakota, North Country Trail hikers can find adventure right nearby. While only a few have attempted to thru-hike the whole trail in one shot, thousands find their way onto a section of the NCT each year. Spring, summer, fall or winter, the trail offers something for everyone. Winter camping and snowshoeing, long-distance trail running, a saunter through quiet spring meadows or vineyards, crossing salmon-filled rivers, a weekend with the grandkids.... you can find what you're looking for on the North Country Trail, and right nearby. This trail can be rugged and welcoming, remote

Open in Map Viewer

Open in Scene Viewer

Open in ArcGIS Desktop

Share

Details

★★★★★ 1 ratings, 4,758 views

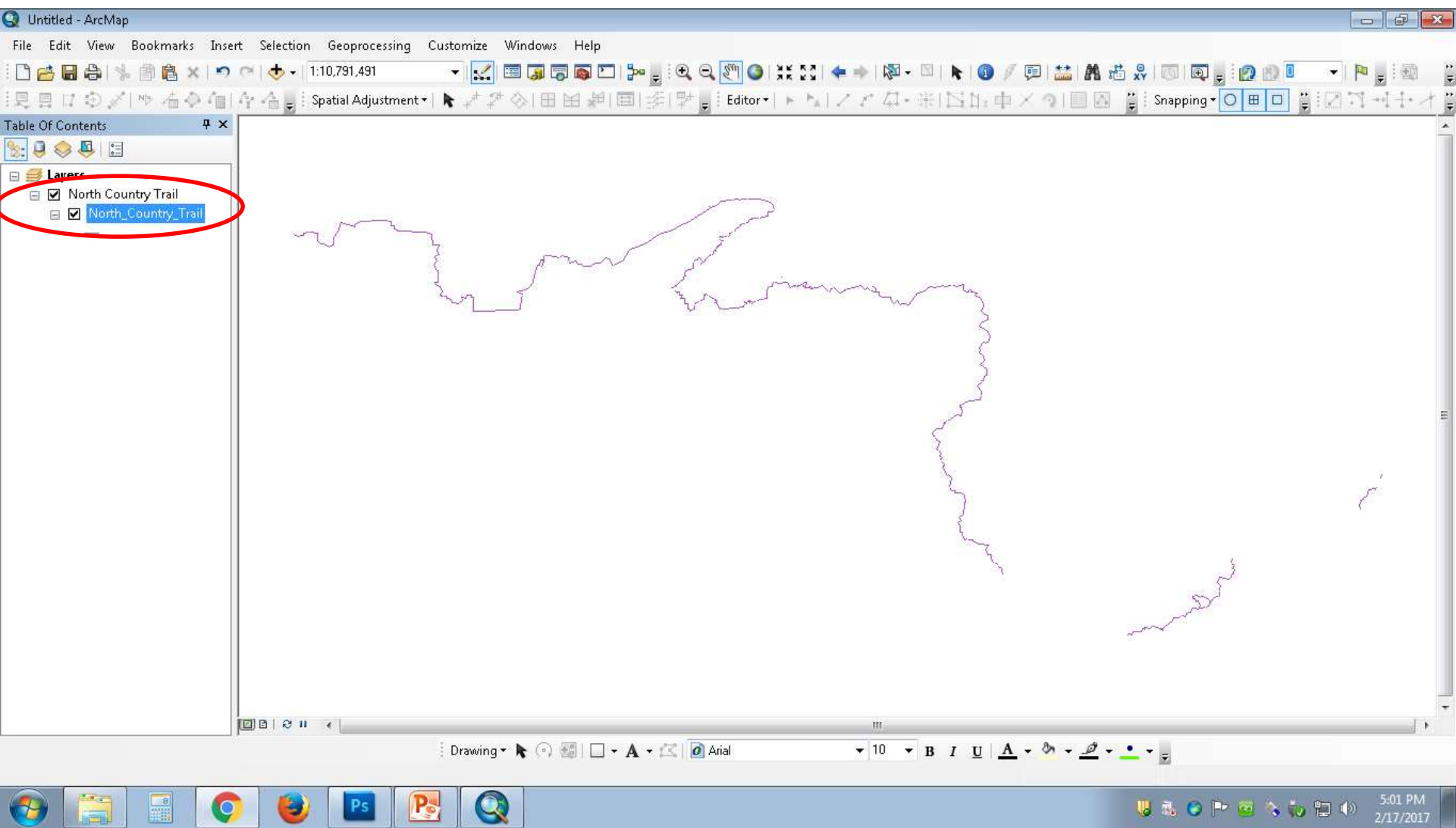
Source: [Feature Service](#)

Created: May 23, 2013

Size: 9 MB

It too can opened in a Map Viewer, Scene Viewer, or ArcGIS Desktop

ArcGIS Online Trail Data can be added directly to ArcMap



When you click Open in ArcGIS Desktop, data is added directly to the Desktop GIS software (if installed on your machine)

Importance of posting as a Feature Layer

ArcGIS Online 'Feature Layer' Data

The screenshot shows a web browser window displaying the ArcGIS Online interface. The browser's address bar shows the URL: <https://nps.maps.arcgis.com/home/item.html?id=fa2c079c78f64b868f7fe9d4e23ec513#overview>. The page title is "North Country Trail". Below the title, there are tabs for "Overview", "Data", and "Visualization". The "Overview" tab is selected. On the left, there is a map of the North Country Trail. Below the map, there is a star icon and the text "Add to Favorites". In the center, there is a description of the trail. To the right of the description, there is a button labeled "Feature Layer" which is circled in red. On the right side of the page, there are several buttons: "Open in Map Viewer", "Open in Scene Viewer", "Open in ArcGIS Desktop" (circled in red), and "Share". Below these buttons, there is a "Details" section showing the item's ratings, source, creation date, and size.

North Country Trail

Overview Data Visualization

This layer shows the portion of the North Country trail that is available from that organization as a GIS layer

by FTKaren

Last Modified: May 23, 2013

Feature Layer

Add to Favorites

Description

The North Country Trail (NCT) connects America's red plaid nation, wandering 4600 miles through America's rugged northern heartlands. Stretching across seven states, this longest National Scenic Trail is brought to local communities through the dedication and hard work of volunteers. From New York to North Dakota, North Country Trail hikers can find adventure right nearby. While only a few have attempted to thru-hike the whole trail in one shot, thousands find their way onto a section of the NCT each year. Spring, summer, fall or winter, the trail offers something for everyone. Winter camping and snowshoeing, long-distance trail running, a saunter through quiet spring meadows or vineyards, crossing salmon-filled rivers, a weekend with the grandkids.... you can find what you're looking for on the North Country Trail, and right nearby. This trail can be rugged and welcoming, remote and festive.

Open in Map Viewer

Open in Scene Viewer

Open in ArcGIS Desktop

Share

Details

★★★★★ 1 ratings, 4,752 views

Source: Feature Service

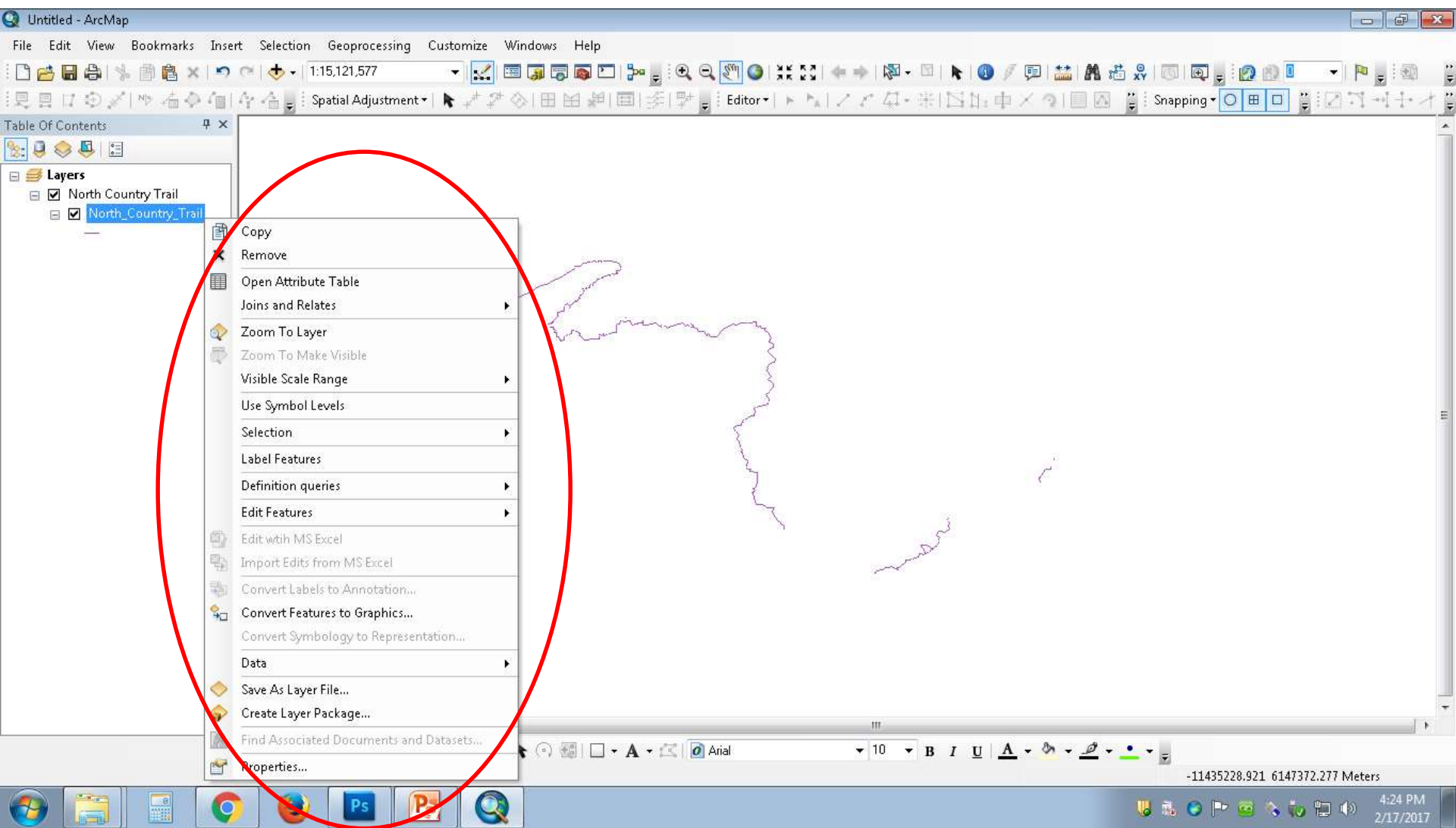
Created: May 23, 2013

Size: 9 MB

3:30 PM 2/17/2017

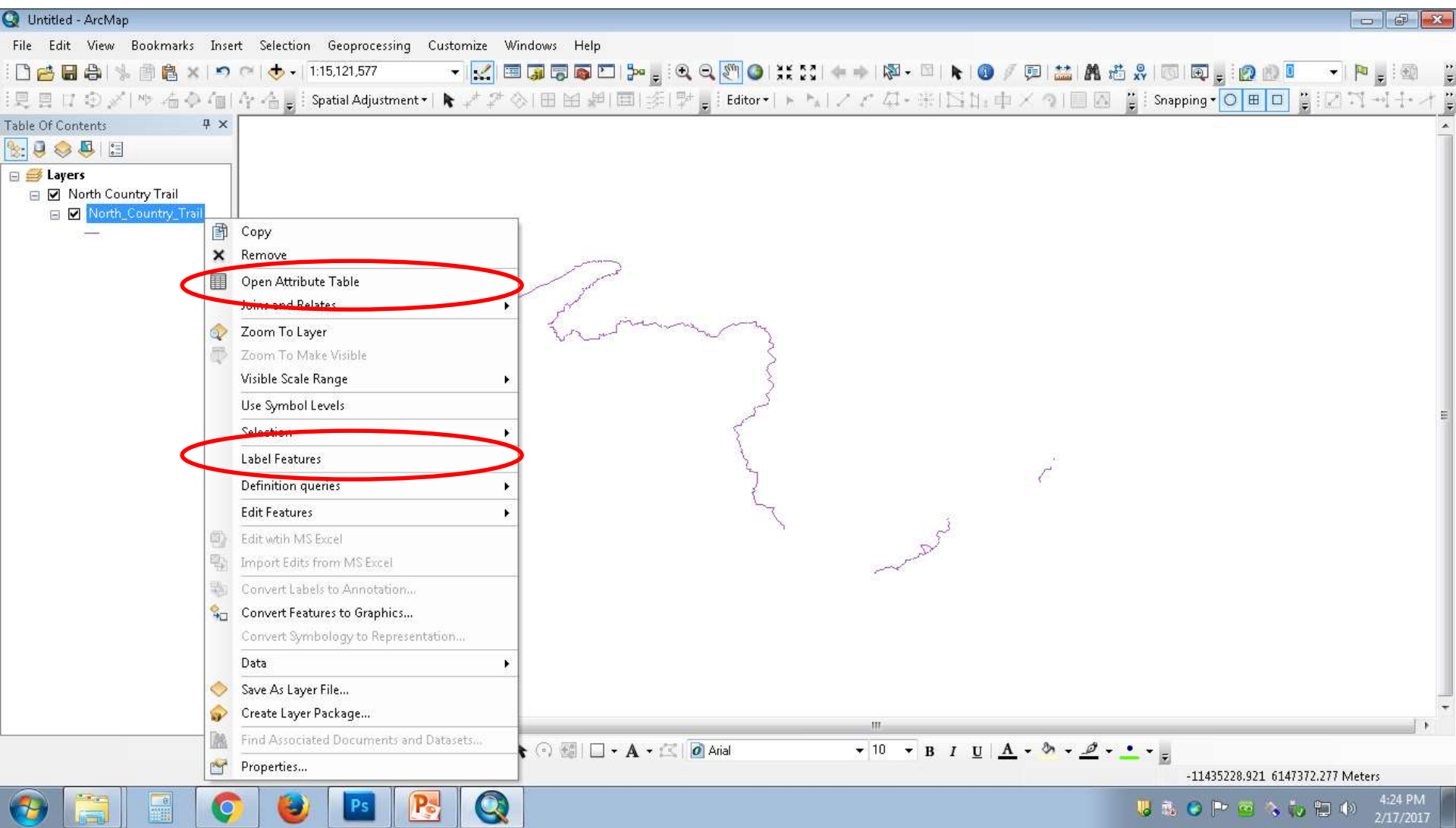
Example of data posted as a 'Feature Layer'

ArcGIS Online 'Feature Layer' Data



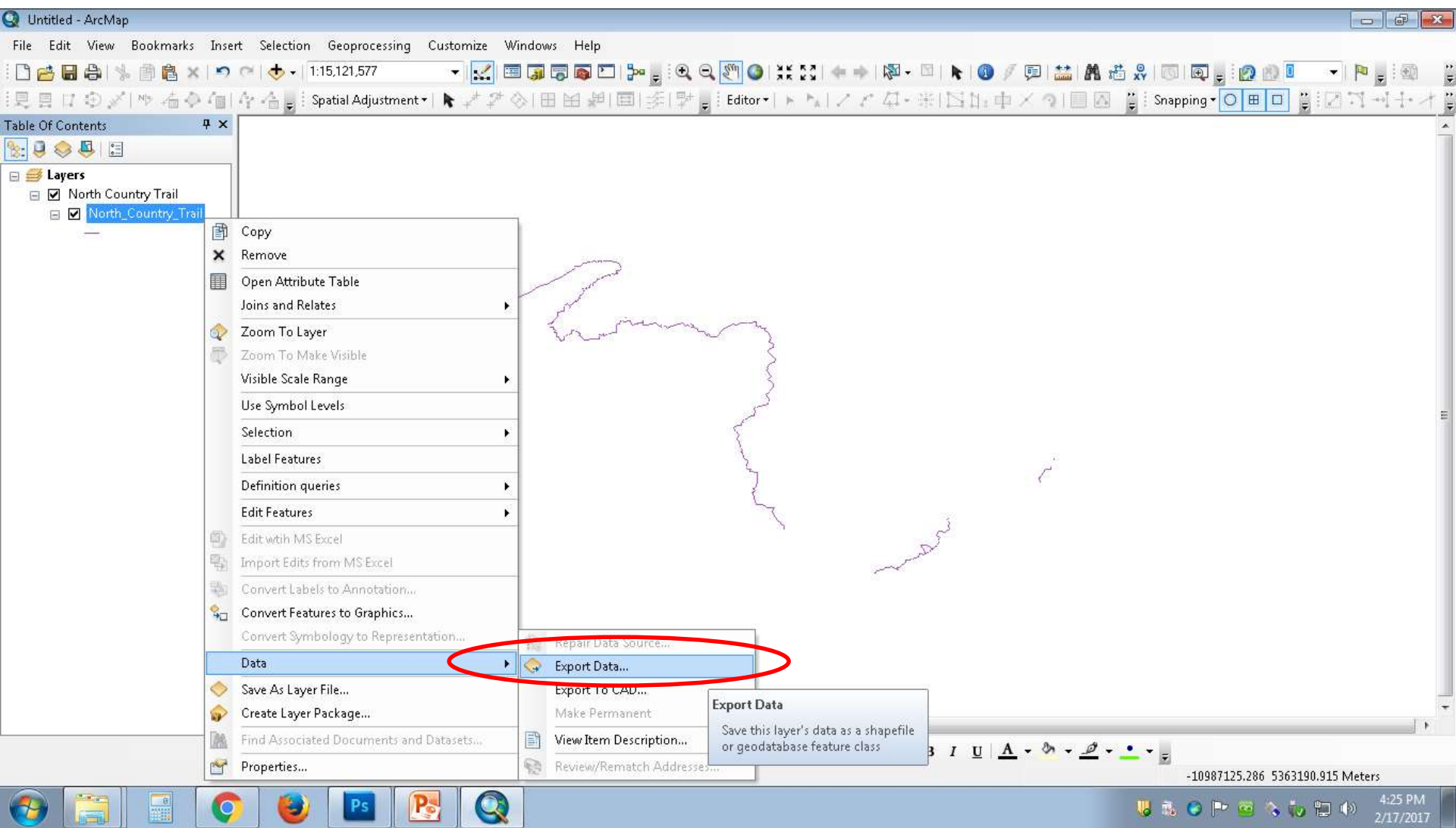
Posting as a 'Feature Layer' allows a user to fully explore and utilize the data when added to ArcGIS Desktop software

ArcGIS Online 'Feature Layer' Data



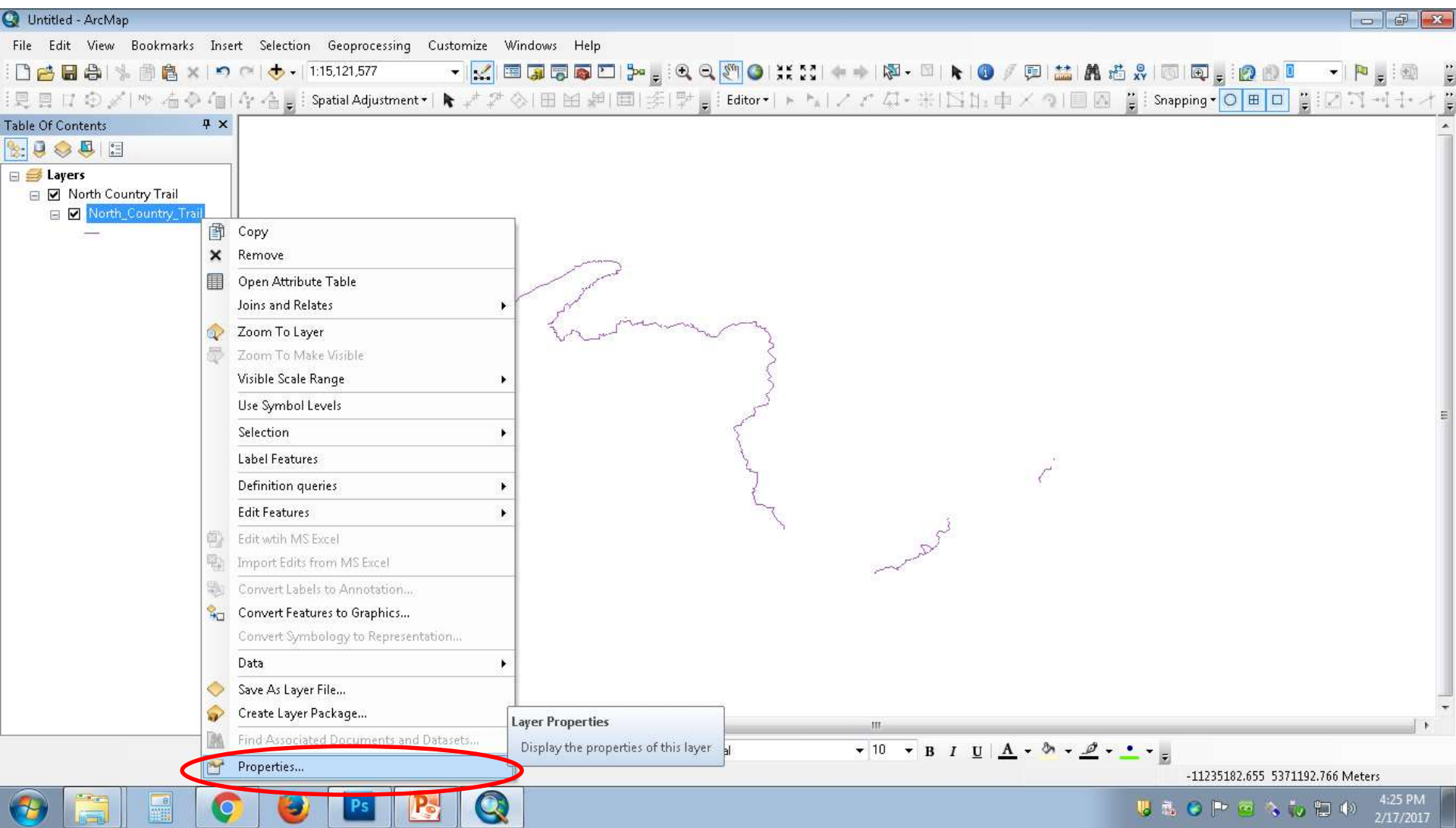
**This includes such things as being able to
'Open Attribute Table' or to 'Label Features'**

ArcGIS Online 'Feature Layer' Data



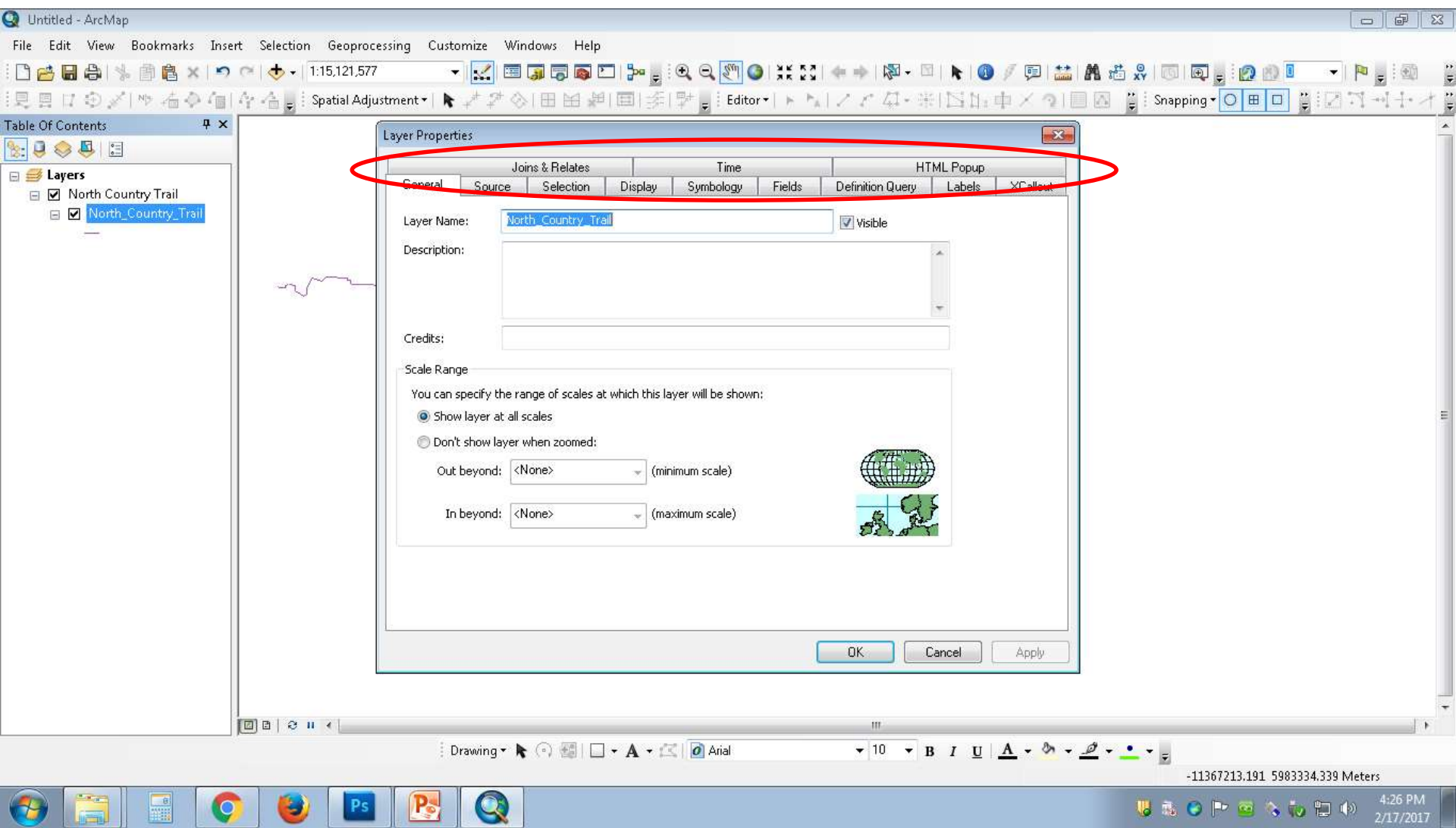
It also allows a user to 'Export Data' or a different format

ArcGIS Online 'Feature Layer' Data



And provides access to the layer's 'Properties'

ArcGIS Online 'Feature Layer' Data



Access to 'Properties' allows a user to adjust elements associated with the data, such as changing the Symbology

ArcGIS Online 'Map Image Layer' Data

The screenshot shows a web browser window with the ArcGIS Online interface. The address bar displays the URL: <https://nps.maps.arcgis.com/home/item.html?id=07da55458e844166bf8197eca732d173>. The page title is 'Trail'. The navigation bar includes links for Home, Gallery, Map, Scene, Groups, My Content, and My Organization. The user's name, Matthew, is visible in the top right corner. The main content area shows a map thumbnail with a red line, a brief summary stating 'A brief summary of the item is not available.', the author's name (redacted), and the last modified date: February 1, 2015. The 'Map Image Layer' icon and text are circled in red. Below the map thumbnail is an 'Add to Favorites' button. The right sidebar contains buttons for 'Open in Map Viewer', 'Open in Scene Viewer', 'Open in ArcGIS Desktop' (circled in red), and 'Share'. The 'Details' section shows 0 ratings, 60,689 views, and the source as 'Map Service'. The system tray at the bottom shows the date and time as 4:30 PM on 2/17/2017.


Trail

Overview

A brief summary of the item is not available.

by [redacted]

Last Modified: February 1, 2015

 Map Image Layer

★ Add to Favorites

Description

An in-depth description of the item is not available.

Layers

[redacted] Trail

Open in Map Viewer

Open in Scene Viewer

Open in ArcGIS Desktop

Share

Details

★★★★★ 0 ratings, 60,689 views

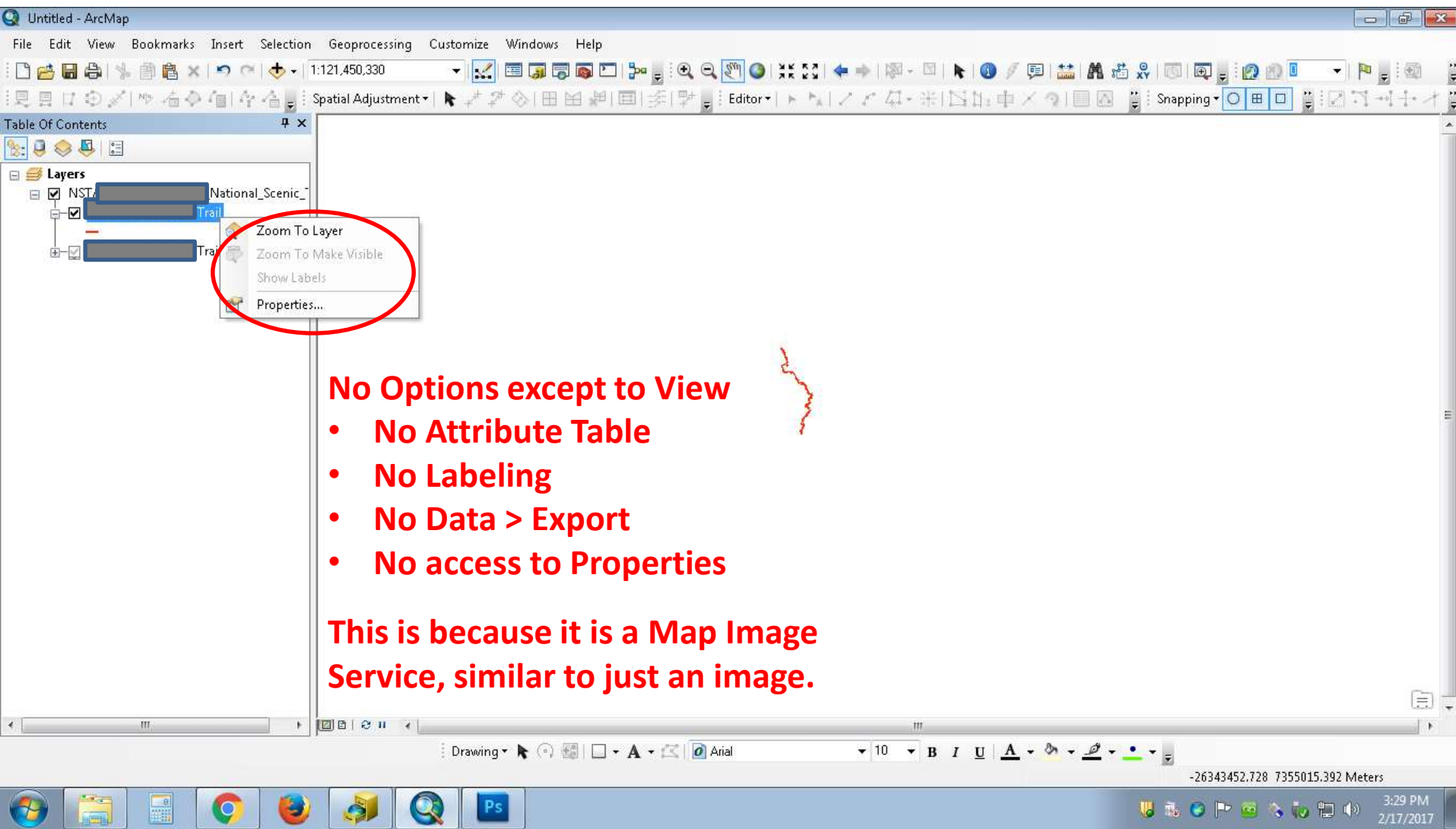
Source: [Map Service](#)

Created: February 1, 2015

Size: 1 KB

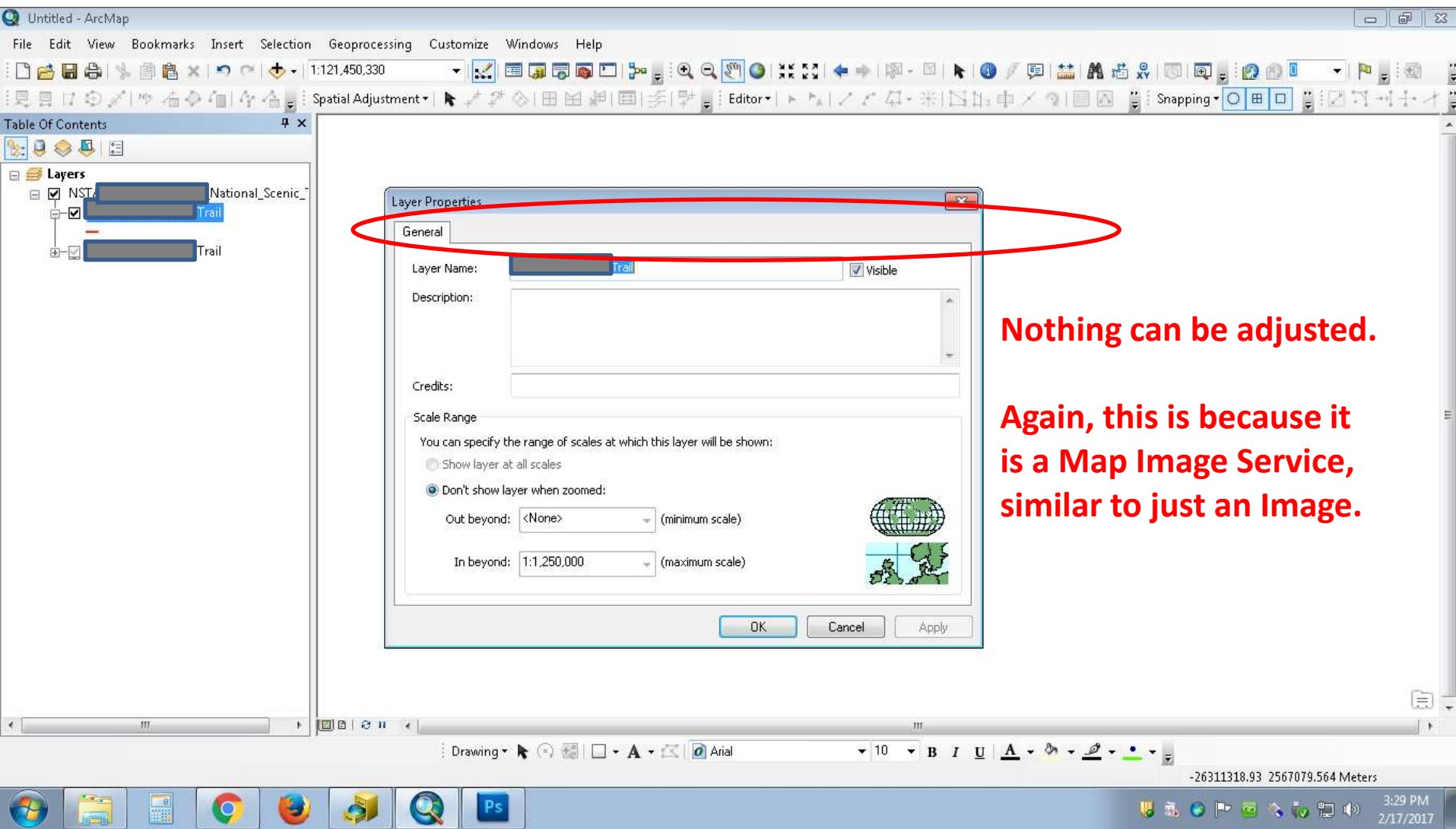
Example of data posted as a 'Map Image Layer'

ArcGIS Online 'Map Image Layer' Data



With a 'Map Image Layer' a user can only view the data

ArcGIS Online 'Map Image Layer' Data



'Map Image Layers' cannot be adjusted

Additional Functionality with ArcGIS Online 'Feature Layer' Data

The screenshot shows a web browser window displaying the ArcGIS Online interface. The address bar shows the URL: <https://nps.maps.arcgis.com/home/item.html?id=45075643620e47b2a4b6072b26619b51>. The page title is "Appalachian National Scenic Trail". The main content area shows a map of the Appalachian Trail Centerline. A red circle highlights the "Export To" button in the "Layers" section, which has opened a dropdown menu with the following options: "Export to Shapefile", "Export to CSV file", "Export to FGDB", "Export to GeoJSON", and "Export to Feature Collection". The "Export to Shapefile" option is selected. The right sidebar shows the "Folder" section with "Appalachian Trail", the "Tags" section with "Appalachian Trail Centerline", the "Credits (Attribution)" section with "National Park Service Appalachian National Scenic Trail Office and Appalachian Trail Conservancy", and the "URL" section with "https://services1.arcgis.com/fBc8".

NTS ArcGIS Online Data.pptx - Microsoft PowerPoint

Inbox - matt_robinson@ x National Scenic Trails x Appalachian National Sc x

Secure | <https://nps.maps.arcgis.com/home/item.html?id=45075643620e47b2a4b6072b26619b51>

Layers

Appalachian_Trail_Centerline_031116

Open In Export To Time Settings Enable Attachments Service URL

Export to Shapefile

Export to CSV file

Export to FGDB

Export to GeoJSON

Export to Feature Collection

Access and

Although a large only. These data accurate, the information depicted is for general reference purposes and not intended to be used as such. It is the responsibility of the user to use this informa consistent with the limitations of geospatial data and with these data in particular. The National Park Service Appalachian National Scenic Trail Office, Appalachian Trail Conservancy, agency partners (including other units of the National Park Service, the USDA Forest Service, and USFWS), and associated trail-maintaining clubs shall not be held liable for improper or incorrect use of the data described and/or contained herein.

The information contained in these data are also dynamic and may change over time. The National Park Service

Folder

Appalachian Trail

Tags

Appalachian Trail Centerline

Credits (Attribution)

National Park Service Appalachian National Scenic Trail Office and Appalachian Trail Conservancy

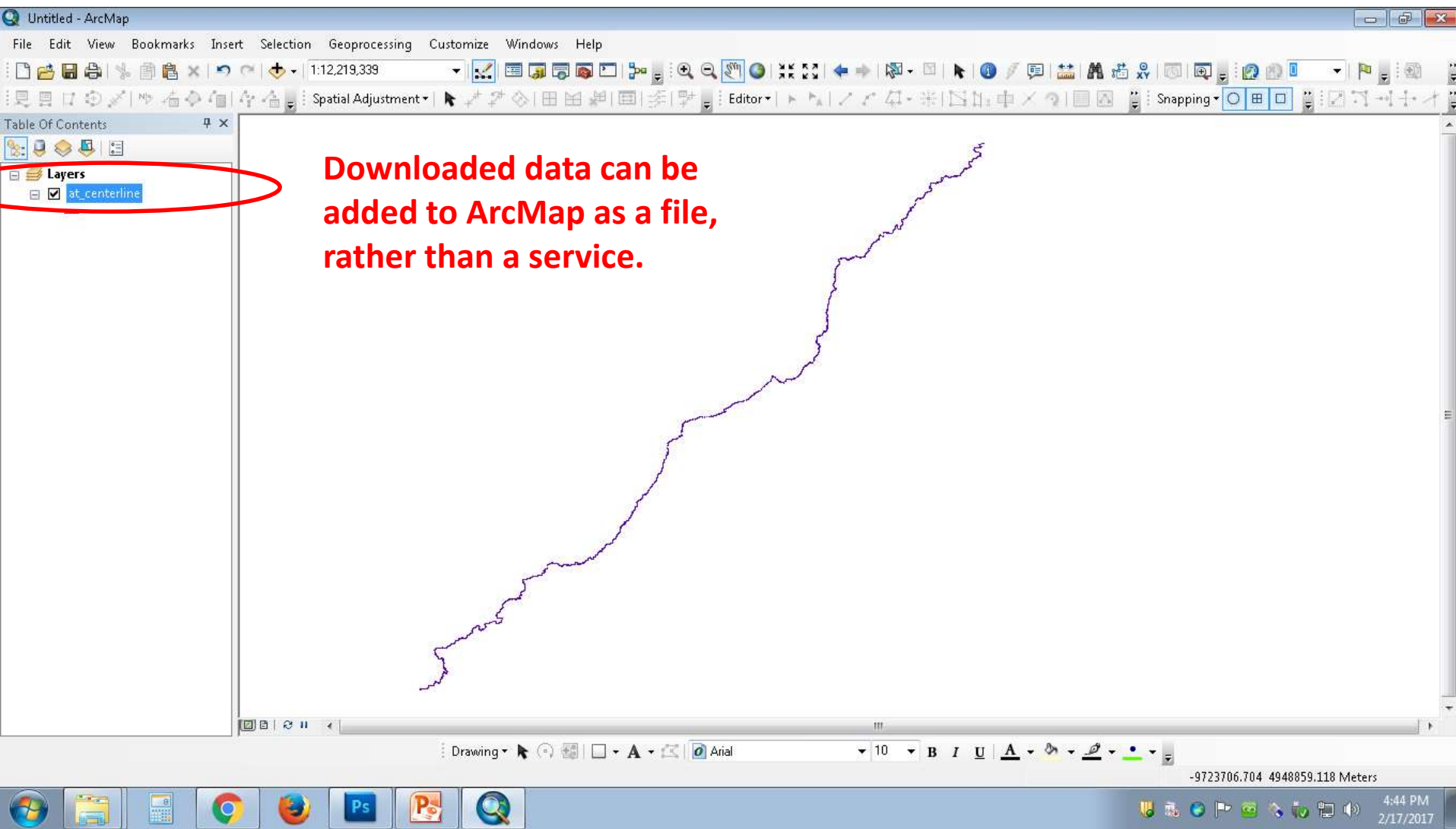
URL

<https://services1.arcgis.com/fBc8>

4:40 PM 2/17/2017

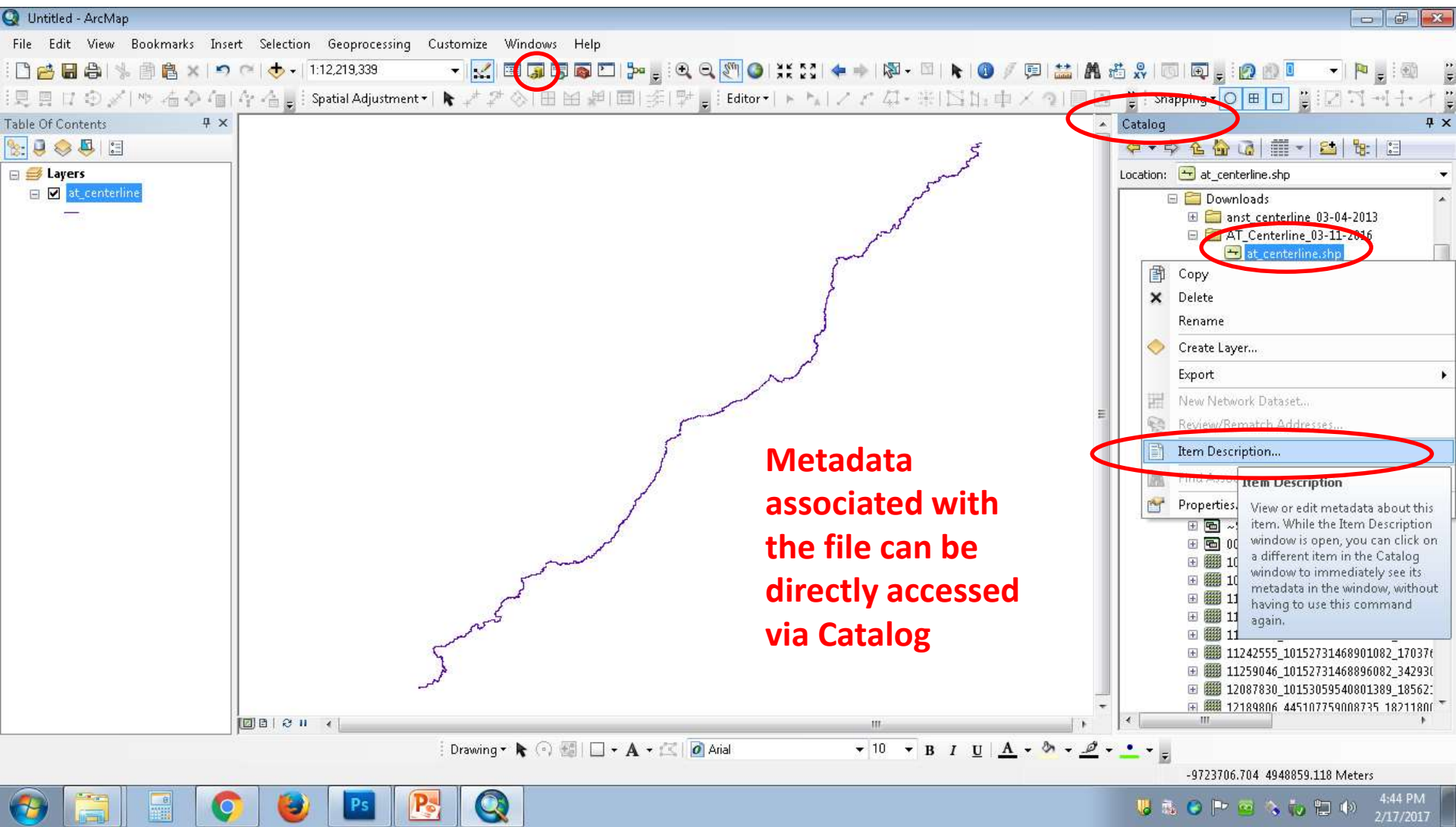
'Feature Layers' can be exported directly from ArcGIS Online to various formats. This helps users that don't have ArcGIS Desktop.

Additional Functionality with ArcGIS Online 'Feature Layer' Data



Downloaded data can be added to ArcGIS Desktop as a file rather than a service, allowing additional flexibility and functionality

Additional Functionality with ArcGIS Online 'Feature Layer' Data



With a downloaded file, a user may view all information associated with that file, including such things as metadata

Additional Functionality with ArcGIS Online 'Feature Layer' Data

Item Description - at_centerline

Description Preview

Print Edit Validate Export Import

at_centerline
Shapefile

Thumbnail Not Available

Tags
A.T. GPS, MA, GA, A.T., Appalachian National Scenic Trail, TN, A.T. National Scenic Trail, NY, NJ, Appalachian Trail, WV, VT, AT, AT, CT, NH, A.T. Centerline, Appalachian Trail Centerline, MD, Appalachian National Scenic Trail, A.T., PA, VA, ME, Appalachian Trail, NC, ME-GA

Summary
This data set was developed to provide a depiction of the Appalachian National Scenic Trail in an usable and easily transferable format between parties so that it can correctly be represented on digital and printed maps; to assist staff members, agency partners, and trail-maintaining clubs with trail and land management duties; and to help local planning agencies, telecommunications companies, and other groups with planning activities, such as siting new developments that could have a substantial impact on the scenic quality of the Appalachian Trail.

Description
This data set represents the most current depiction of the Appalachian National Scenic Trail centerline. Locational information used to create this data set were obtained from Global Positioning Systems (GPS) survey data collected between 1999-2014 using mostly Trimble GPS equipment.

Credits
National Park Service Appalachian Trail Park Office and Appalachian Trail Conservancy

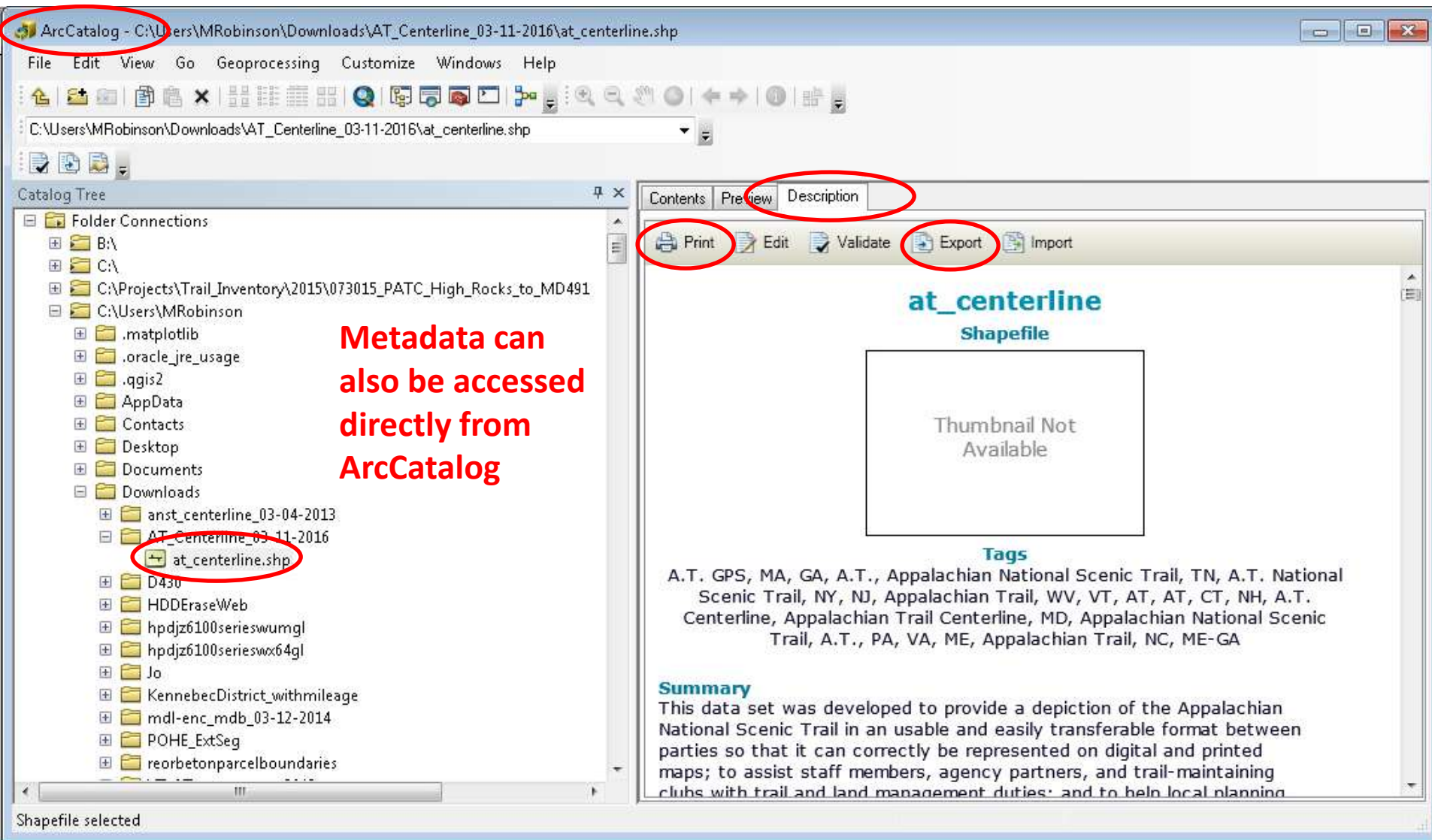
Downloads
anst_centerline_03-04-2013
AT_Centerline_03-11-2016
at_centerline.shp
D430
HDDeraseWeb
hpdjz6100serieswumgl
hpdjz6100serieswx64gl
Jo
KennebecDistrict_withmileage
mdl-enc_mdb_03-12-2014
POHE_ExtSeg
reorbetonparcelboundaries
VT_AT_open_areas_2012
NERO_OAs_ajb.mdb
437-01 HIGH TOP MOUNTAIN BASE.
Hightop_Boundary.dwg
#SORO_IE_Data_2008_to_2013.xls
~\$OVERALL_MARO_surveyrequestsfr
001 Combined Exchange Process.xls
10420422_10152716400511512_65211;
10686730_10154326634154867_73800;
11221656_10153091611141082_36436;
11231103_894025490651133_6564703;
11241227_10152731468911082_10156;
11242555_10152731468901082_17037;
11259046_10152731468896082_34293;
12087830_10153059540801389_18562;
12189806_445107759008735_1821180;

-7531705.623 5178404.954 Meters

4:49 PM
2/17/2017

Here is an example of FGDC compliant metadata associated with a downloaded file from ArcGIS Online

Additional Functionality with ArcGIS Online 'Feature Layer' Data



Metadata may be printed or exported directly from ArcCatalog (for those that have ArcGIS Desktop installed)

In Summary

- **Data posted on ArcGIS Online may include:**
 - **A Description of the Data**
 - **Access & User Constraint Information**
 - **A Link to the Actual Data, which can be opened in either a web map OR in Desktop GIS**
- **Data published as a Feature Layer allows users to:**
 - **Fully explore data (open attribute table, label, etc)**
 - **Export to shapefile and other formats**
 - **Change symbology and other properties**
 - **View FGDC compliant metadata associated with downloaded or exported data**
- **Data published as a Map Image Layer can only be ‘viewed’**
- **Data not shared ‘publically’ can’t be viewed by partners or the public**

We Recommend

- **Everyone publish an official version of their trail data ‘publically’ – where anyone can view it – that excludes any sensitive data you don’t want others to see.**
- **Description, Access & User Constraints, and other information should be populated fully.**
- **Data should be published as a ‘Feature Layer’.**
- **Downloadable data should include FGDC compliant metadata.**

We Recommend (continued)

- **An official data steward, responsible for posting “official” data for each trail, be identified and established. Their name should be shared with other Trail users and we should link exclusively to their data.**
- **Updates should be made periodically to the online data so it remains current, and an agreed upon frequency for updates (6 months? once a year?) should be discussed.**
- **Data Standards – including map scale, file size, metadata and documentation, and data attribute information – should be discussed and we should strive for some agreement and standard used among all trails.**

NOTE: The data standards piece does not have to be completely figured out to move forward with the rest of this proposal.