

Please stand by for realtime captions.

Good afternoon and welcome to the FT LP Academy. I am a user support library and. I worked with the NCO -- today's webinar is trying to from the federal government. A road map to your Geospatial Destinations by John Olson a librarian for government NGO information Syracuse University. He said your questions into the chat and send your questions to all panelists or all participants. I will monitor the chat and questions will be answered at the end of the talk. I will also add in future links from the slide. This is being recorded and will be made available shortly. I will now hand the microphone to the speaker who will take it from here.

Hello, everybody. I am going to walk you through some of the Cartographic Resources together. What are the goals of this session? First, we will briefly talk about a workflow for breaking down cartographic and map related queries that hopefully will guide you to the right type of print and digital maps, atlases and geospatial data. Second we will get to know some of the lingo, so to speak and acronym specific the use for cartographic and geospatial resources. Third we will survey the landscape so to speak. Some of the commonly used resources that I have found over my 30 plus year career as a maps librarian. I will point out specifically links to find specific types of geospatial data. All the websites will be available through the federal government and other municipal or other open access sources. Cartographic reference questions and consultations can be challenging at times. Since I work in an academic library most of my questions come from students and faculty but we are also a depository library so I also get questions from the general library over the years I've developed a series of what I call filtering questions that I ask which will help me filter through or narrow down the different mapping resources that I can best answer the question. Most often they will ask me I need a map of, fill in the blank. Nine times out of 10 it will be a specific geographic place. But they might also add or include a theme or subject for the map like I am looking for a street map of Denver or a partial map of Buffalo or a soil map of Crawford County, Pennsylvania. Also by asking these questions will help them better articulate more precisely what types of geographic information they need. The first question is how much detail are you looking for? Do you need a large-scale map that shows lots of street and building detail? Or do you need a small-scale map that shows a wide overview of a region or state. Second question, what time. Are you looking for? Do you need something current today? Or something historical day from the 18th century. Third question would be what type of subject content are you looking for? Do you need a basic outline not? A basic type of map. A land use map? Or maybe arrow photography. Fourth, do you need this in a print or digital format? Will a print map from the collection were? Or if they needed in digital format do they need it as a raster or vector file. Finally, how well it be used? Will it be used in a research paper or as part of the data set? Is it for publication? Personal use? Or just for reference? Now that you have more information about what they needed all help guide you to the appropriate resources in the collection or if you need a jump onto the computer. Also know the limitations and availability of the resources. One example is aero photography that didn't really exist before the airplane existed in 1903 and even then the progress, the process wasn't refined until the 1920s or put into widespread commercial use until the late 1930s. So what else do we need to know? We need to understand the acronyms use with cartographic resources like agency names. We are now the government loves to use acronyms. This disease not only runs rampant at the federal level but at the state and local levels too. Examples include the familiar, USGS, CDC, DOT, NOAA, NASA but you might also run across some older acronyms for agencies that no longer used or maybe they have changed their name or maybe it was absorbed by another agency or maybe it doesn't exist anymore such as ASCS, AAA, OSS, DMA, NIMA. acronyms are also designated -- designated various equivalent of various map series. The digital equivalents of topographical maps or for flights of aerial photography you will find them as DRG or DRQ. Geospatial layers will also fall into this acronym soup like VMAP or vector map. and DEM or digital elevation models. which is S the elevation portion of the topographic map only in digital form. Geospatial formats are not excluded when using software there are geospatial format that you should know. There are -- these are some of the current format but there are a couple here that are heading for really like E00, DBF, all are data file types that can be used to create maps in a GIS project. but some geospatial formats are no longer used and will need to be migrated to a new file format before they are lost forever because even some of the conversion tools within some GSI software is that can translate or migrate from these older wild types are themselves becoming obsolete. In my experience these have been the most requested map subjects that can now be found in print form and digital format. The only thing to remember is the time frame from when the print version and the digital versions began. But remember that not every print map has been scanned yet. So looking at topographic maps, census maps, flood maps, land-use maps and fire insurance maps. When you look for sources of cartographic data the web

is a wonderful resources. These web resources tend to fall into three categories and I will go over each type and present some examples. Here is how I define each type. Real time or near real time or streaming. Real-time sites include maps or data that are continuous be updated and in a real time interval. These may also allow you to view and/or download current and archived content. Interactive maps, interactive sites have maps that allow various data points or layers to be turned on or off. Some are capable of geospatial data downloading or creating a custom map that you can save or download. Some of these sites may also have real-time or near real-time updating capabilities and others will allow you to upload your own geospatial layers to create further customization of your map. And static maps or static site or with atlases. These are sites that contain map images that you can view or download and are of a fixed place and time. Chances are these are only scanned raster images. Let's take a look at a few of these. Many of you are probably not familiar with this site called air now from the EPA. It is a website that monitors air quality from stations across the country and is updated in near real time or once every hour. You can search by Z.I.P. Code, to yours eight. There is also an option from the maps and data tab. Up here. From this Tabbs drop-down menu for a interactive map. Also in that list is a link to air data where you can download a number of different types of air quality data sets as well as links to other data tools. The USGS real-time data page is a great site for locating maps about volcanoes, earthquakes, floods, wildfires, landslides. Across the U.S. in real-time or near real-time. Soil maps. This is an example of an interactive mapping site from the U.S. the eighth grade when you click the start W SS button the site allows the user to use this device civic area of interest by clicking on a number of AOi buttons on the toolbar. Once an area has selected you can choose more than 150 layers or variables of soil are land-use to create a custom map that can be downloaded as a static image or as a vector layer to be used in a GIS. the archive soil surveys link on the main page will lead you to older historical County soil surveys which can be downloaded as PDFs. The older surveys have many but not all the same categories of information that the website has. Also with the exception of the pre-1939 surveys. The PDFs will also have aerial photography included. If you can't find a print or scanned air photos for a specific place and some other online collection or site this is an alternative source for finding the coverage. Topographic maps are also a wealth of information and are a means day and map collection. These maps are available in print and digital format. The most current editions as well as historical sheets are available through many online repositories through the USGS. Like the USGS store, the U.S. national map viewer and the USGS historical topo map Explorer. Some of these will have different areas available to download and most if not all of the older historical additions for each sheet are available back to the 1980s. -- 1890s. The website gives you the option to download them in a variety of format. JPEG, Geo tiff, Geo PDF and even some for you Google Earth users. Geologic maps from the national geologic map database from USGS is the first place to go for sourcing or locating geological maps and research for a specific area that has an extensive search interface. You can easily narrow down your search results. Also, try searching the USGS publications warehouse and as well the USGS library websites. These two resources were a topic of a previous FDLP webinar last May and if you go to that recording you will learn much more about those two resources. I highly recommend it. Other good sources for locating geologic maps would be to search individual state government agency website for specific areas within that date. Within that state. Aerial photography from the USGS Earth Explorer is a comprehensive repository. For area of photography and satellite imagery from the 1930s to present. I will give a slight warning that the site is not intuitive to use and I highly recommend reading through the help documentation first before diving in the. It has a high propensity to use lots of acronyms. So you have been warned. You can search by place or feature name or satellite imagery if you search my path and grow. Sartre your search by zooming into an area you need and you can enter the coordinates for that area or select the use map button. I find the quickest way to set your location then select your data and click the data set button and select your category. Aerial imagery. Then select the type of imagery. Like the oak you or map. Like, DOQ or the map. if you want to download any of the images you will need to create a free user account. Once done you can login and then you can download imagery, air photos and DEMs. for other web sources I would search out specific state geospatial clearinghouses. also, search for air photos on county and city government sites. Check with some of the colleges and university libraries in your date or contact your county agricultural extension office. The U.S. Census has a large number of mapping and data resources available. and could be a FDLP webinar all in itself. I will touch on a few links . The homepage gives you a number of options to explore data. The two areas I want to point out are the censuses data and maps page and they are the interactive map and mapping files link. The interactive maps page has links to 23 different interactive mapping tools and these are all data viewers and interactive mappers. Where you can see data variables mapped out. There are options to download from these tools as an image file or as a PDF but will vary with the tool used. For Rob mapping layers to use and they the mapping files link provides access to those and are available by year and by level of geography or other variables with layers dating back to the 1990 census. For GIS boundary files for pre-

1990 censuses you should visit the NHGIS or the national historical graphical information system. A free website but you need a web sister -- register before you can use or download data from the site. The FEMA flood map service site allows you to view and download PDF for maps or flood insurance rate maps. You can download the map as a GIS layer for specific map sheets or areas. Also there are links to various types of reports including changes and revisions to his civic maps -- a list of current and historical maps for that location. The NOAA weather maps site has a huge amount of data. There are surface analysis maps with some links to interactive maps. Weather fronts, precipitation map. There are also forecast tools such as flash flood report, local storm reports and extreme precipitation monitors. There are even a few prototype tools you can try out. If we look at the top drop-down menu you will find links to other forecasting and analysis tools. Archived data in a number of other drop-down menus to use to other sources of information. The top row of links will take you to other government related whether links such as the aviation weather center. Climate prediction Center. Storm prediction Center and the National Hurricane Center. They all have maps will be visualizing the data they produce. The National Hurricane Center has a map on its homepage that gives you the current forecast for any hurricane development in the Atlantic or central and eastern Pacific. Clicking on a marker will give you important and current information about that hurricane. Along with -- along the top there are more links that provide analysis, whether links, radar and archived data. Under the data and tools tab there is also a latitude longitude distance calculator and a link to download blank hurricane tracking maps in case your patient wants to use their own sharpie. Nautical charts come in both print and digital formats but all print charts will be a thing of the past come January 2025. All charting projects will be a downloadable PDF format or as a customized size chart for the user specifications from the new ENC or electronic navigation chart and will be updated on a weekly basis. Charts can be searched for by place name, chart number or latitude longitude. They can be downloaded by clicking on the print charts tab at the top left corner of the site's index not. Then click the PDF link to the right of the map. There is also a link to see the historical charts as well. You can also locate just historical charts by using the historical chart link on the homepage at the bottom of the general use charts yet charts date back to the 1700s but you will find more than just nautical charts because there are other non-nautical maps. These charts only cover the U.S. and the U.S. territories. Not other parts of the world. For places outside the U.S. you would need to find other sites for international charts like the British Admiralty chart. The NIH's GIS portal has a link near the bottom for the NCI counselor Atlas. When you click on the launch Atlas button you can select from categories on the left side to display map. Clicking on the NCI cancer Atlas link will open a page where you will find more information about the Atlas. If you need to download data layers to input into a GIS or view the various cancer maps, click on the Geos racial tab at the top and then select data sources. From here pick a category and then select your topic. Link will take you to the maps and information. Also some resources on this page may be linked to site outside the main NIH site and will take you to other sources like the EDC. The CDC's geospatial data resources page has multiple links through the geospatial or geostatistical resources page two statistical and geospatial sets and layers. That you can download. But you will need to join them with other layers in a GIS. In the left column, the interactive map applications and data link has more links to data visualization sites and interactive mapping tools organized by health category. Cartographic the U.S. Fish and wildlife wetlands map provide access to an interactive mapping interface that allows you to overlay wetland interviews over aerial photos for your specific location. Click on a map polygon and a small window will open and will give you a description of that wetland feature. Using the get data tab at the top provide links to download -- some other useful cartographic resource. A good resource about answering questions about a country. Every entry has a basic outline map with major cities and includes a few prominent physical features. Each country's listing will have basic information about the geography, the people, the economy, et cetera. You will find some entries if you scroll down will have country outline maps that overlay the U.S. for comparison. Very useful in showing countries comparing in size. The geographic names information system or GNIS as a place to find official placings for populated features and places in the United States. Searching by a place or feature name will be followed by more information about that place. Any decisions made by the board and when it was included into the database. You can also download database data from links on the right side. The geographic name server or DNS is from the NGA and contains official placings and features for all international countries and regions. But the information is only available by downloading the entire file forays country as a compressed text file that you will need to open an Excel is a tab delimited file. Once downloaded and decompressed you can perform various sorting and formatting options. You will have latitude and longitude examples. cartographic the national archives and records administration is one way to define historical maps. Look through the historical record to find maps for Civil War battles, railroad maps, plans of old military fort and maps of World War II. Cartographic subsections within each section will allow me to see if each section had scanned it though, how may I haven't and and are available online. Once you have a wrapper image on his screen. Options download it. Cartographic the Library of Congress site has over

50 thousand maps and in their digital collections. The earliest dating back to 1100. Maps can be viewed and downloaded in a view different size JPEG cannot or as a TIF format. The collection can be searched by keyword and can be further refined by using the facet on the left side of the search map page the other option is to select one of the 25 different objects of the collections available. Other resources for searching historical maps or by locating others the libraries and archives as well as County historical societies. Many of these sites will have scanned some of their digital collection. there are also a number of repositories and digital collections at academic and tuitions where you can view and download historical U.S. government maps are they are available as free. Stanford University has an interest in historical collection of maps created by the office of strategic services or the OS is used during World War II. The maps are unique snapshot when they were used in the actual planning and preparation of various campaigns. This collection of 900+ maps and items have been scanned and can be downloaded. Danfort is one of a handful of universe it is across the country that had smaller quantities of OSS match deposited into their collections after the war. So far Stanford is the first to offer their collection online.

We have all heard about redlining maps from the H.O.S. the the home owners loan Corporation. If you haven't discovered this website you need to discover it. It is from the University of Richmond and the created digital archive of the maps and their associated security documentations or descriptions for the 250+ cities in the eyes dates where they were done. Click on a city.and an image of the original redlining map appears. Click on the map options tab at the top and it'll give you three ways to view the map. There is ace and map with the shaded areas or you can view just the shaded gray areas separated from the background or as a polygon layer. Click on the shaded layer in any of the three options and the detailed description of the house was a big area will be this late in a window on the left. Click on the show scan button within that text window and it'll display an image of the detail security administration for that area. On the top row on the right there is an option to download the scanned maps or geo-rectified image or as a polygon fire for use in a GIS. You can also download a PIF. All are arranged in a couple of order. The University of Texas map collection archive is a another rich white for older U.S. government issued maps. This website is now inactive and no new maps have been added 2021. But it is still an excellent resource for finding older maps series from various federal agencies and other governments that did mapping for other countries around the world. Finally I will touch briefly on some geospatial data clearinghouses. There are many geo-data portals or repositories out there and searching for public domain, GIS can be daunting but there are some sources that can help as a first step. For finding geospatial data from federal government I would highly recommend starting your search using data.gov if you are looking for layers that you know come from a particular federal agent me I would include the agency name into your search strategy or go directly to that agency's website, USGS, census, HUD, HSS. And find their search box or site index and -- also search for data layers for many of the state from their geospatial clearinghouses the same way. And do the same for layers needed for counties and these. Their sites might have spotty coverage especially if it is a small, city town or village. Smaller cities may not have the staff to maintain a OpenGL portal. Check for data layers for those smaller cities and villages on their counties geo-portal. Larger cities will have some sort of weather map or link to a repository and they may also have an interactive mappings right. Most of the site I have seen are for locating property tax or partial location information but you will find others. But the largest that is will have multiple geospatial repositories are extensive interactive mapping sites. New York City for instance has at least four different geo-data repositories. Cities will have apps for real-time or near real-time data. For instance the city of Syracuse, where I live, has an app for residents that can be used during the winter months to see when their street was last plowed in near real-time with 15 minute updates. Color coding for the time of last plowing. This is my favorite app. And remember all clearinghouses and data repositories are not created equal. And they may not have the same level or kinds of data layers or access. Every municipality has their own criteria as to what kind of data layers they make available. But wait, there's more. Maps that are out of this world. With today being the anniversary of the moon landing, let's ask Law Review astronomical site. The astrological science center and NASA gazetteer of planetary nomenclature. Search results also provide details on the origin of that feature. If you click on the feature in the middle display and highlight it on a map and provide further details about it. There are also links to a number of maps series for the moon and other planets by using the links on the left side of each of those pages. And with a total solar eclipse heading for the U.S. next spring NASA has created a wonderful light and lots of information about solar eclipses. Plus there is a large map you can download for the April 8th eclipse that shows the path of totality. Syracuse is one of those that is going to be dark. Looks like everyone in the continental will see at least a partial eclipse. There are also links about safety tips and how to prepare. Get ready and pray for clear skies. In conclusion I would like to first thank FDLP Academy for providing you the opportunity to talk with you today and I hope I haven't overwhelmed you too much with lots of visions of maps that things in your head. I hope the

information I provided has been helpful and that you will explore some of these links deeper. With that I will not entertain questions.

I do have to agree with your comment about USGS Earth Explorer. If you don't mind going back to slide 23. We did have a question. Do any of these resources give records for those that have maps to catalog?

That I do not know. I have not seen any. That's a good question. I have not seen any links that would actually provide a MARC record for a specific layer. The layers should have if they are GIS layers they should have metadata which are provided the information for creating a MARC record. Cartographic

We don't have any questions for the moment if you have any questions put it in the chat. On the meantime do you want to elaborate on anything?

Anything specific?

Something you might want to elaborate on a little more. The a brief overview of some of the more common used sites that I've come across in my years of helping patrons. Each one, each of the site can have a learning curve like I said, the Earth Explorer has a steep one but, I think websites like topo view are pretty self intuitive. You can click the get maps and then dive right in by using either a place name or the sheet name.

We do have a new question. Is there an online resource that gives you the acres of a given area? For example, the -- does not seem to be able to do this.

I do not know of a site that can do that. I know you can do things like that within GIS software programs.

Thank you John. I believe we all agree your presentation was excellent. Are you willing to do a live demonstration of topo view?

Let me see if I can get to it. Are the links live on these?

No, unfortunately these are images.

Yeah, there's Datuk.

John, if you have a browser that is up you can put a link in the topo view and then share your screen.

Okay, let me go to -- okay. I have topo view open.

You are going to in the upper left-hand corner click on share and it should be my desktop and you will select whatever browser you have that screen open on.

Okay. Did it work?

It dead. We see your screen. You might want to maximize it.

Okay. Get maps that is where I start. It takes a couple seconds for this to go away. We can go by location. Whether it be, let's see -- is it not working? Let's try that. Mary go. There we go. Here are the various different topographic maps that'll be broken down by scale. This is the most common produced today but the older 15 minutes there is maps like these here. We can click on any of those and we can hit show on the screen which will show there or you can download them as an image. Here it is it is downloaded to my computer already has a zipped file so then you would go to your file Explorer wherever you get your downloads are and decompress it and you can open it up and any kind of viewing programmer they want to import it in as an image into a Word document or if you want to use it in photoshop or illustrator, some of those programs like that. That is just a quick view.

What does the info button show? You hovered over the info button briefly.

Info button?

Let's see --

Oh here. It kind of gives you a breakdown of just some information that is usually in the the bottom text material on the actual topo sheet. It also give you information about the scanned information about how it was scanned.

We have a new general question. Are all of these resources free to access or do some have limitations on who can use them? For example, only institutional access?

These are all freely available. These are from website from the federal government agencies. It is open access. Even the websites from some of the institutions, the academic institutions that I showed from the University of Richmond or Stanford those are open access sites that you can use and download. You don't need any username or password to get into those. Only the Earth Explorer site you need to create a free user account. And the national historical GIS site which is the same way. But once you login you can download any of the data or images that are there.

If you wouldn't mind stop sharing your screen so we can go back to the WebEx for.

Perfect. Thank you for a fantastic presentation. This webinar has been recorded and you will be notified shortly when it will be available to view. We are putting into the chat a link to a voluntary survey about this webinar. If you enjoyed today's webinar please check out some of our upcoming FDLP webinars. We will put two links in the chat . The first is about the FDLP Academy and is a second is our calendar of events. Thank you again John and have a marvelous day everyone.

[Event concluded]