WELCOME OHIO VALLEY REGIONAL DEVELOPMENT COMMISSION'S

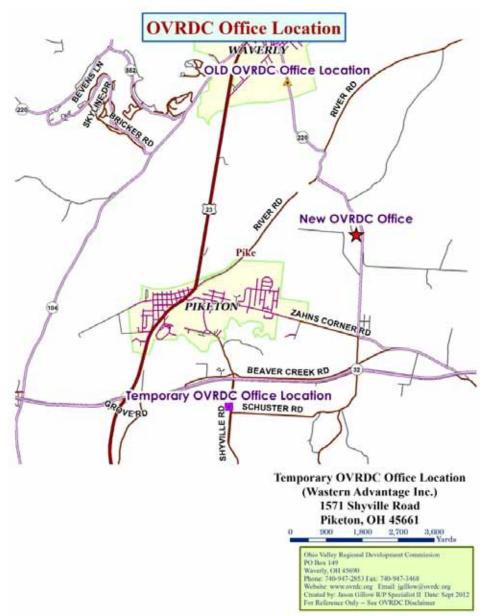
OVRDC GIS USER GROUP MEETING

Held at

Pike Co Government Center, Waverly, OH February 12, 2013



- Minutes from October 30th meeting.
- Announcements:
- OVRDC Website OVRDC GIS User Group
- OVRDC has moved to temporary Office Location and is in the process of building new Office. The new office will be built by Spring of 2013 – check out our Facebook Page for Status





- Federal Programs News from Charles Hickman, Geographer, USGS -- on:
 - Launch of new Landsat 8 Satellite The Landsat era that began in 1972 will continue with the successful launch of the Landsat Data Continuity Mission (LDCM) in February 2013. Global, synoptic, and repetitive coverage of the Earth's land surfaces will continue at a scale where natural and human-induced changes can be detected, differentiated, characterized and monitored over time. Landsat imagery is used in landuse, remote sensor projects, etc. OhioView is a good source and reference. Websites: www.ohioview.org & http://landsat.usgs.gov/LDCM_Landsat8.php
 - For National Map, great source for national datasets, USGS have updated the elevation and LIDAR page at <u>http://nationalmap.gov</u>.
 - News on National Hydrography Dataset (NHD)
 http://nhd.usgs.gov/newsletter_list.html
 - National Map Users Conference, May 20-22, 2013 in Denver, held in concert with the USGS Community for Data Integration (CDI) Workshop, May 23-24, 2012. <u>http://nationalmap.gov/uc/</u>
 - Other USGS News: http://nationalmap.gov/tnm_news.html
 - National Geospatial-Intelligence Agency (NGA) contributed \$30,000 and USGS contributed \$15,000 for the Ohio Statewide Imagery Program 2013 (OSIP 2013).
 - Update on US Topo at: <u>http://www.directionsmag.com/articles/us-topoa-new-national-map-series-2012-update/300690</u>



- Other Federal Programs Updates -
 - For the Census Bureau,
 - Census Geography Dept.: <u>http://www.census.gov/geo/</u>
 - New 113th Congressional District Shapefiles and 2012 Tiger Files are available for download: <u>http://www.census.gov/geo/maps-</u> <u>data/data/tiger-line.html</u>
 - 2010 TIGER/Line[®] Shapefiles Pre-joined with Demographic Data: http://www.census.gov/geo/maps-data/data/tiger-data.html
 - New look for American FactFinder: <u>http://factfinder2.census.gov/faces/nav/jsf/pages/index.xhtml</u>

 The National Geodetic Survey Releases Updated Ten-Year Strategic Plan 2013 – Government Agency responsible to maintaining Continuously Operating Reference Station (CORS) Program. Websites:
 www.ngs.noaa.gov & http://geodesy.noaa.gov/web/news/Ten_Year_Plan_2013-2023.pdf



- Federal Programs
 - USDA Farm Services Agency (FSA) the National Agricultural Imagery Program (NAIP). Ohio is now scheduled for new one-meter, leaf-on, color NAIP imagery in the <u>summer of</u>

2014. <u>http://www.fsa.usda.gov/FSA/apfoapp?area=home&subject=prog&topic=nai</u>

- USDA NAIP Data along with other datasets (DEM data) are available to download at - <u>The Geospatial Data Gateway</u> (GDG) – it is the One Stop Source for environmental and natural resources data, at anytime, from anywhere, to anyone. <u>http://datagateway.nrcs.usda.gov</u>
- USGS Earth Explorer : <u>http://earthexplorer.usgs.gov</u>

 FEMA DFIRM Data: National Flood Hazard Layer (NFHL): https://msc.fema.gov/webapp/wcs/stores/servlet/FemaWelcomeView?storeId=10001&catalogId=1 goutage



State Program Initiatives:

- LBRS See Handout Online Whitepaper Report at <u>http://ogrip.oit.ohio.gov/ProjectsInitiatives/LBRS.aspx</u>
 - 75 counties New to download Lawrence and Meigs Counties
 - Final counties that do not have LBRS in OVRDC Region include Clermont and Scioto Counties.
 - State of Ohio and ODOT wants to complete this program for Ohio – Currently, ODOT is willing to fund up to 80% on a LBRS Project, contacted Dave Blackstone, Section Manager for ODOT <u>dave.blackstone@dot.state.oh.us</u> for further details. Other funding is CEAO <u>http://ceao.org/</u> and OGRIP.
 - There has been changes coming down to state DOTs from the Federal Government.
 - OGRIP and ODOT willing to work with counties.
 - LBRS positions counties to support the transition to NG9-1-1



- State Program Initiatives:
 - OSIP II imagery for Ohio 2012 counties are completed and ready for delivery. New mandate on delivery – OGRIP will not deliver hard drives to counties that have not filled out their yearly county GIS profile. <u>http://ogrip.oit.ohio.gov/Coordination/CountyProfiles.aspx</u>
 - 2012 County Mosaic will be ready to download.
 - 2013 flights set for March-April 2013 includes Central Ohio. OVRDC counties included Fayette, Ross and Vinton counties.
 - See handout for OSIP Status http://ogrip.oit.ohio.gov/ProjectsInitiatives/StatewideImagery.aspx
 - OGRIP Ohio County Profiles See handouts and link above
 - OGRIP Forum Meeting February 25, 2013 at ODOT Central Office Columbus, Ohio.
 - OGRIP and ODOT Talk of developing a new state parcel mapping program similar to LBRS – new interest from different sources. Part of the focus from Oil and Gas Shale.
 - For more information contact:
 - Dave Blackstone, Section Manager for ODOT dave.blackstone@dot.state.oh.us or
 - Jeff Smith, OGRIP Jeff.Smith@oit.ohio.gov



- Ohio URISA
- Chapter News For the latest go to <u>www.ohurisa.org</u>
- <u>Highlights:</u>
 - <u>URISA Leadership Academy</u> ULA 2013 will take place May 13-17, 2013 at the Hyatt Regency Riverwalk in San Antonio, Texas. Early discounted rate available until March 1!
 - <u>2013 URISA Exemplary Systems in Government (ESIG) Awards Program Announced</u> -The Urban and Regional Information Systems Association (URISA) is accepting applications for its Exemplary Systems in Government (ESIG) Awards through Monday, April 22, 2013. The awards recognize exceptional achievements in the application of geospatial information technology that have improved the delivery and quality of government services.
 - Presentation Proposals Invited for GIS-Pro 2013 Presentation proposals are now being accepted for GIS-Pro 2013: URISA's 51st Annual Conference for GIS Professionals taking place September 16-19, 2013 in Providence, Rhode Island. Proposal deadline is March 4.

MATCH - Please follow the link if you're interested in volunteering or finding a mentor. User Group Funding - See our website on how to request funding.



Local and Regional Initiatives:

- Appalachian Ohio Geospatial Data Partnership
 - Federal Geographic Data Committee (FGDC): Article in the 2012 Annual Report of the FGDC on AOGDP: See Handout
 - In the process of becoming a 501 C 3 non-profit organization.
 - 2012 NSDI CAP Grant to collect and update of Ohio GIS Metadata in ROMONA (Random Access Metadata for Online Nationwide Assessment) Project. Project is largely completed. http://www.bhgis.org/inventory
 - Local Government Innovation Fund Grant (LGIF) Gallia County has signed contract with Voinovich Center – OVRDC is written in as a sub-contractor to promote the program.
 - <u>www.geospatialpartnership.org</u>



- Local and Regional Initiatives:
 - Southern Ohio GIS User Group Local area water companies – News?
 - Heather E. Cummings
 - Highland County Water Company, Inc.
 - 937-393-6092 or 937-393-4281 ext 104
 - <u>heatherc@computers-plus.net</u>



- OVRDC Infrastructure
 Mapping Project
 - OVRDC is providing infrastructure and utility mapping services to local governments and communities through the use of its GIS and GPS.
 - OVRDC uses a Trimble GeoXH 6000 Series Handheld GPS, Trimble LaserAce Range Finder and other equipment.







OVRDC Infrastructure Mapping Project

– Communities thus far:

- 1. Village of Greenfield Complete
- 2. Village of Lynchburg Wrap up
- 3. Gallia County (Dan Evans Industrial Park) Wrap up
- 4. City of Wellston Current
- 5. Village of West Union Spring 2013
- 6. Village of Williamsburg Spring 2013
- 7. Village of Aberdeen
- 8. Village of Piketon
- 9. Village of Seaman
- 10. Village of New Richmond
- 11. Village of Georgetown
- 12. City of Gallipolis
- 13. Village of Winchester
- 14. Village of McArthur?



- OVRDC Infrastructure Mapping Project
 - Working with local GIS personal to help acquire data and scanning services.
 - Partnership with Buckeye Hills Hocking Valley Regional Development District in offering ArcGIS Server online mapping services to communities.
 - Standard Products delivered:
 - PDF Maps
 - Hardcopy maps
 - Arc Reader Data Package Maps on DVD
 - DEMO



OVRDC Water and Sewer Survey –

- Jessica Purdon, Economic Development Specialist, OVRDC
- -Email jpurdon@ovrdc.org
- Other News:
 - -Trimble: See Handouts

-ODOT Rural Transportation Planning Organization Pilot Project - OVRDC

-ArcGIS: See handouts – sign up for Newsletters and emails it is free: http://www.esri.com/esri-news/publications



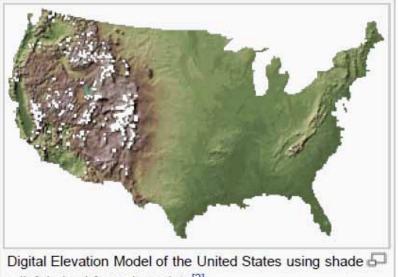
- Round table Discussion
 - -What GIS activities are going on in your office?
 - -County GIS Updates
 - -GIS activities in the region
 - -Future ideas for the group.



- Presentation ""Tool of the Meeting" What are DEM's – Basics and demonstration of ESRI Spatial Analysis
- Speakers: Jason Gillow



What are DEM's – (wiki.GIS.com) -A digital elevation model (DEM) is a digital representation of ground surface topography or terrain. It is also widely known as a digital terrain model (DTM). A DEM can be represented as a raster (a grid of squares) or as a triangular irregular network. DEMs are commonly built using remote sensing techniques, but they may also be built from land surveying. **DEMs are used often in geographic** information systems, and are the most common basis for digitally produced relief maps.

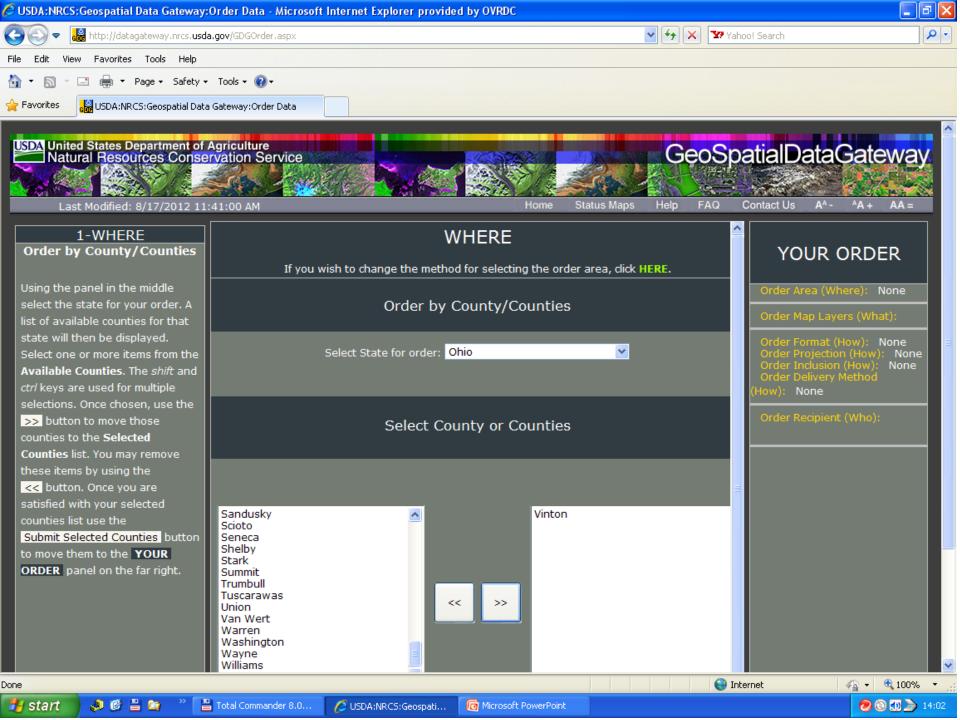


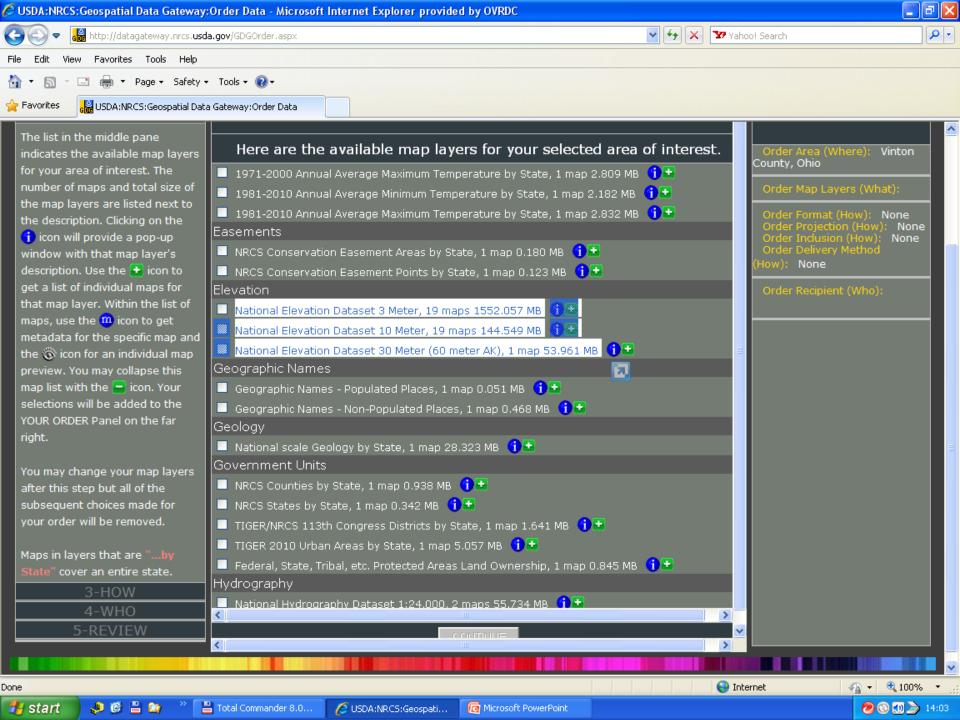
relief derived from slope data^[2]

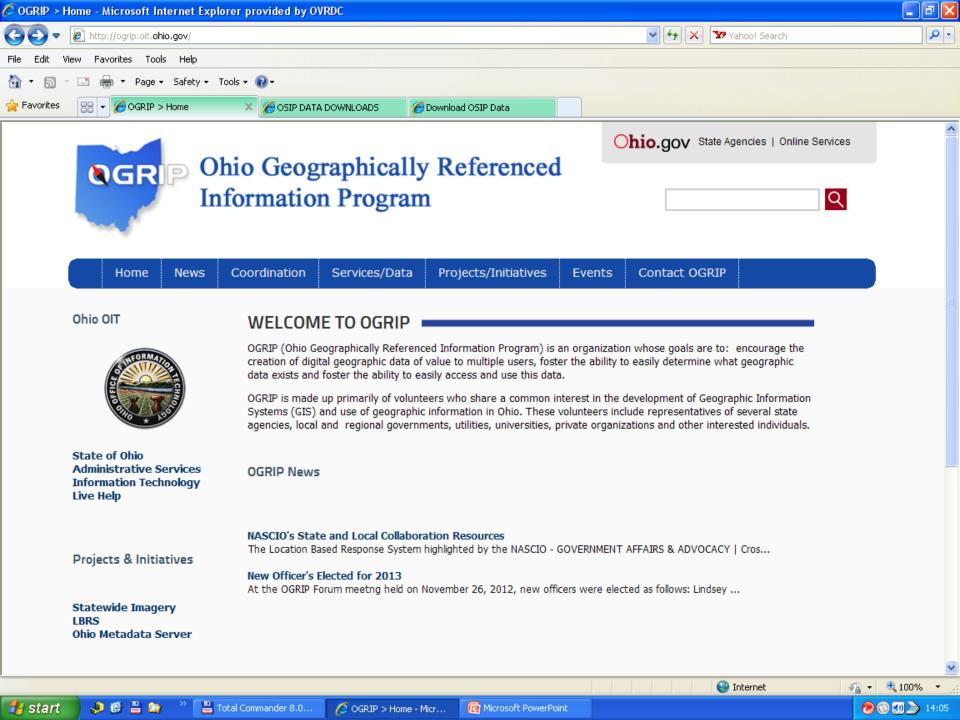


- What are DEM's Sources to download DEM's
 - OGRIP -<u>http://ogrip.oit.ohio.gov/ServicesData/GeodataDistribution/DEM.a</u> <u>spx</u>
 - OGRIP OSIP 1 Highly detailed information -<u>http://ogrip.oit.ohio.gov/ProjectsInitiatives/StatewideImagery.aspx</u> and <u>http://gis3.oit.ohio.gov/geodata/</u>
 - USGS CLICK <u>http://lidar.cr.usgs.gov/</u>
 - USGS NED The National Elevation Dataset (NED) is the primary elevation data product of the USGS. The NED is a seamless dataset with the best available raster elevation data of the conterminous United States, Alaska, Hawaii, and territorial islands. Ohio's OSIP data was used to upgrade this data for Ohio. <u>http://ned.usgs.gov/Ned/index.asp</u>
 - USGS National Map <u>http://nationalmap.gov/viewer.html</u>
 - USDA NRCS The Geospatial Data Gateway (GDG) http://datagateway.nrcs.usda.gov/









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🚖 Favorites 🛛 💀 🗸 🏀 Statewide :	Imagery X 🄏 OSIP DATA DOWNLOADS		
	Cooperative Purchasing Agreement		<u>^</u>
	OSIP I - This section is specific to t	he previously completed 2006-2008 OSIP project.	
	Products		
	Standard OSIP I products included 1FT GRID and ASCII grid format, and 2M Lil	Color Orthophotography in GeoTIFF and MrSID format, 2.5FT DEM in ArcInfo DAR postings in LAS format.	
	Optional OSIP I products included 6IN (photography.	Color Orthophotography, 2FT and 5FT contours, and 1M Color Infrared	
	Project Status		
		roducts were collected from 2006 - 2008. The state took delivery of 51 e remaining counties were delivered in 2008 & 2009.	
	elevation data through a Cooperative Pu by providing enhanced resolution produc taxpayer dollars over the cost of obtai	ave taken advantage of the OSIP program to obtain enhanced imagery and irchase Agreement (CPA) with the State of Ohio. The CPA benefits the state cts OSIP while saving participating counties an estimated 4.5 million in ining these imagery, LiDAR and elevation products individually. The savings are le realized through a statewide program and the fact that the state is nistration.	
	Data Distribution		
	Services, both ArcIMS and WMS. Map services and is available from the Ohio	delivery mechanisms. The primary method of delivery is through on-line Map Service connection information is available through the metadata for the Metadata Server by searching for "Live Data and Maps" using the keyword nect directly to these services to access terabytes of imagery without the cally.	
		nd DEM data is available for download on a per county basis with links provided ching for "Downloadable Data" using the keyword "OSIP" or by visiting the	
	In addition the 2M LiDAR data in LAS for Information Coordination and Knowledge	ormat and derived DEM data is being hosted by the USGS Center for LIDAR e (CLICK) site.	
	OSIP I Links		
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DOWNLOAD BY COUNTY		
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2006- 2010 OSIP I DOWNLOADS		
DOWNLOAD BY COUNTY		
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State Plane South 1FT (5000' x 5000')		
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What are DEM's – USGS NED - All elevation values are in meters and, over the conterminous United States, are referenced to the North American Vertical Datum of 1988 (NAVD 88). The vertical reference will vary in other areas. NED data are available nationally (except for Alaska) at resolutions of 1 arc-second (about 30 meters) and 1/3 arc-second (about 10 meters), and in limited areas at 1/9 arc-second (about 3 meters). In most of Alaska, only lower resolution source data are available. Today we will be looking at 3-Meter area for Ohio.



 What are DEM's – Using today ArcGIS Spatial Analyst extension provides a broad range of powerful spatial modeling and analysis capabilities. You can create, query, map, and analyze cell-based raster data; perform integrated raster/vector analysis; derive new information from existing data; query information across multiple data layers; and fully integrate cell-based raster data with traditional vector data sources.



- What are DEM's
- Looking at Lynchburg OSIP DEM Data 2.5ft Resolution
- Vinton County USGS NED Data 3 Meter
- Spatial Analyst Tools:
 - Mosaic
 - Hill shade
 - Aspect
 - Slope
 - Contours
 - Raster Calculator
 - Overview of the tools



What are DEM's DEMOSTRATION Software **ArcGIS Basic (ArcView) 10.1 Spatial Analyst** www.esri.com



- What are DEM's
- Wide range of analyst can be done with DEM's
 - View shed Analyst
 - Groundwater
 - Hydrology
 - Image Analysis
 - Landuse Analysis
 - See Brochure
 - Questions



OVRDC GIS USER GROUP

 Group Discussion Next Meeting set for Tuesday, May 14, 2013, **1 PM to 3 PM at Pike County Government Center.**



OVRDC GIS USER GROUP

Jason Gillow

Research/Planning Specialist II Ohio Valley Regional Development Commission P.O. Box 149 Waverly, OH 45690 Phone: <u>740-947-2853</u> or <u>800-223-7491</u> (In Ohio) Fax: <u>740-947-3468</u> Website: <u>www.ovrdc.org</u> Email: jgillow@ovrdc.org or email@ovrdc.org