

DGDC Meeting Minutes

November 13, 2014

Attendance List:

Bruce Allen DeIDOT
Roger Barlow USGS
Naomi Bates..... Landmark Engineering
Stephanie Belinske..... DPH
David Bennett..... DTI
Mark Biddle DNREC
Dave Braig JMT
Don Burris DelaSoft
Kim Cloud..... DTI
Dan Cook DTI
Lauri Dafner Esri
Lauren Devore..... DeIDOT
Jim Galvin Dover-Kent MPO
Jay Gerner DeIDOT
Jeremy Gibb..... City of Dover
Alice Guerrant DCHA
Danielle Lamborn Kent County
Nicole Minni..... UD-WRA
Miriam Pomilio..... OSPC
Mila Robinson..... DeIDOT
Brooke Santiago..... City of Wilmington
Debbie Sullivan DTI
Josh Thomas..... DeIDOT
Seth VanAken Esri
Art Walker USDA-NRCS
Despina Wilson DOE
George Yocher DPH

Welcome & Introductions

Miriam Pomilio started the meeting at 9:05 am. She welcomed everyone to the meeting and introductions were made.

Approval of August 2014 Meeting Minutes

Kim Cloud made a motion to approve the [August 14, 2014 meeting minutes \(PDF\)](#). Mark Biddle seconded the motion and it passed unanimously.

Regional GIS Conferences

Past Conferences

NSGIC Annual Meeting – September 14-18, 2014 – Charleston, SC – Kim Cloud reported it was a really good meeting. There were discussions regarding Transportation, E911, and other federal initiatives.

Delaware eDUG – October 1, 2014, Kent Co Building,

Dover, DE – Deb Sullivan reported that the eDUG meeting went well with several presentations on UD's transportation project, ArcGIS Online, FirstMap, GeoEducation in Delaware, and Tips and Tricks.

MAC-URISA New Jersey – October 22-24, 2014 – Atlantic City, NJ – Seth from Esri and Dave from JMT attended and said it was a good conference with presentations on ArcGIS Online and other topics of interest. About 250 people attended and ESRI hosted pre-conference workshops.

APA DE/MD Conference – October 28-29, 2014 – Newark, DE – Josh Thomas reported many presentations were about web presence and census information. Jim Gavin reported it was a two day conference and over 300 people attended.

Upcoming Conferences

- GIS Day – November 19, 2014 – Dover, DE
 - Nicole – Everyone is excited. 300 students from 5 schools attending, giving the museum a donation for their use because of vendor sponsorships.
- Esri MUC – December 2-4, 2014 – Baltimore, MD
 - Miriam, Mike Townshend, Debbie Sullivan, Rick Steffers, and Don Burris, will be attending
 - Downtown Baltimore at the Hilton, preconference workshops by ESRI

- Plenary is Allen Carroll, former National Geographic Cartographer, now in charge of Story Maps at Esri.
- ESRI Federal UC - February 9-10, 2015 – Washington, DC
- ESRI Developer Summit – February 11, 2015 – Washington, DC
- NSGIC Mid-Year – February 23-26, 2015 – Annapolis, MD
 - Still accepting presentations
 - Close by so more DE folks should look to attend
 - Grants available to pay for registration and accommodations
- Coastal Geo-Tools, March 30-April 2, 2015 – Charleston, SC
- TUGIS – March 17, 2015 – Towson, MD

Presentations

NRCS – Art Walker presented on Web Soil Survey Application, his presentation is attached to the meeting minutes.

Esri – Lauri Dafner from Esri presented on ArcGIS Pro which is available now. Lauri’s presentation is attached to the meeting minutes.

Delaware Project Updates

eGIS Project - FirstMap Update

Miriam gave an update on the FirstMap. The system is in production and we are looking for agencies to start loading data as appropriate. Contact Firstmap@state.de.us to get set up to load data. New datasets that have been loaded include: 2012 LULC, FEMA flood maps. The revised 2007 LULC will go up shortly. When Delaware receives the new DEM from the LiDAR, it will be served via FirstMap. However the point cloud from the LiDAR will not be served there due to the fact it is mostly needed on local machines for processing. Delaware will rely upon hard drives for distributing the point cloud at this point.

Miriam will be doing outreach to various agencies. She has already met with Public Health and is scheduled to meet with Libraries soon. DTI has set up a distribution list on Blackboard and you can subscribe to that for updates on FirstMap. You can also follow FirstMap on Facebook and Twitter.

Maryland’s iMap has a regional geocoder which includes Delaware address data and we’ve received permission to use that geocoder until the Delaware one is up and running. Once we launch our geocoding service, MD iMap will consume our data into theirs to maintain a regional service.

Land Use Land Cover Data for 2012

Miriam reported the 2012 LULC has been received and QA/QC’d by several state folks. It is now available on FirstMap. Also the Impervious Surface product is available. The revised 2007 LULC will be available soon as well.

Sandy Relief LiDAR Grant

Roger Barlow – Vendor has delivered data to USGS Missouri office for QA/QC. Corrections are due back to the vendor around Thanksgiving and any corrections will be made. Paying partners will receive the data sometime around January via a hard drive.

NOAA bathymetric LiDAR was flown into Early September. The data processing is ongoing and due January 15, 2014. It is anticipated that the final bathymetric LiDAR will be delivered in mid-April 2015. A Shoreline will be developed at 20,000 scale as part of the project.

Federal Update

USGS – Roger Barlow reported that the NHD Stewardship agreement has identified Scott Figurski from DNREC as the new steward; NHD group is reviewing the MOU. Watershed Boundary stewardship will be done by Mark Nardi, local USGS mapping office.

NRCS - Art Walker reported they are working on tool to covert vector soils to raster soils. It is anticipated that the new tool will be available in December, 2014.

Census – Anne Jeffers sent a report via email that Census will be doing a Boundary and Annexation Survey for 2015. It will be digital only. The BAS will be updated shortly for 2015 as well.

Academia Update

University of Delaware – Nicole Minni mentioned an interesting conference, Geo Philly, is being held November 20, 2014.

Open Comment Period

Alice Guerrant, Historic and Cultural Affairs, reported that the new CHRIS application (being built in ArcGIS Online) is close to being completed. Historic and Cultural Affairs hopes this new program will launch at the end of the year.

George Yocher, Delaware Public Health, reported he attended the Census Workshops held November 12. He found the workshop very informative and noted that Census also has a geocoder available for public use. Miriam noted that Census will be scheduling more workshops next year and hopes to gear a few towards the GIS user.

Seth Van Aken, Esri, reported that ArcGIS Pro can be used offline by enabling it before you go offline. He also noted the ArcGIS Pro website provides a comparison of its functionality with ArcGIS Desktop.

2015 Meeting Schedule

The 2015 DGDC Quarterly meeting schedule has been set. They will all begin at 9 am and be held in the Kent County Administrative Complex, Room 220. They are as follows:

February 12, 2015
May 14, 2015
August 13, 2015
November 12, 2015

Adjournment

Roger Barlow made a motion to adjourn the meeting and it was seconded by Dave Bennett. The meeting was adjourned at 11:30 am.

Web Soil Survey

By

Art Walker

GIS Specialist, USDA-NRCS



USDA is an equal opportunity provider and employer.



What is a Soil Survey?

- Science-based study of soil
- Three major parts of a survey are: soil mapping, soil descriptions, and soil interpretations
- Soil scientists play a major role in conducting these surveys

Brief History of NRCS Soil Surveys

- The last major soil survey to be completed in Delaware was in 1970
- Delaware NRCS celebrated 100 years of Soil Surveys (1899 – 1999)
- In 2010, NRCS completed its first digital mapping of a soil survey in New Castle County
- There are currently 1.3 million acres of soils digitally mapped throughout DE

Advantages of Digital Soil Surveys

- Access to up-to-date soils data and maps
- Can be used in GIS software (ArcMap) or online
- Provide useful information to anyone who needs it

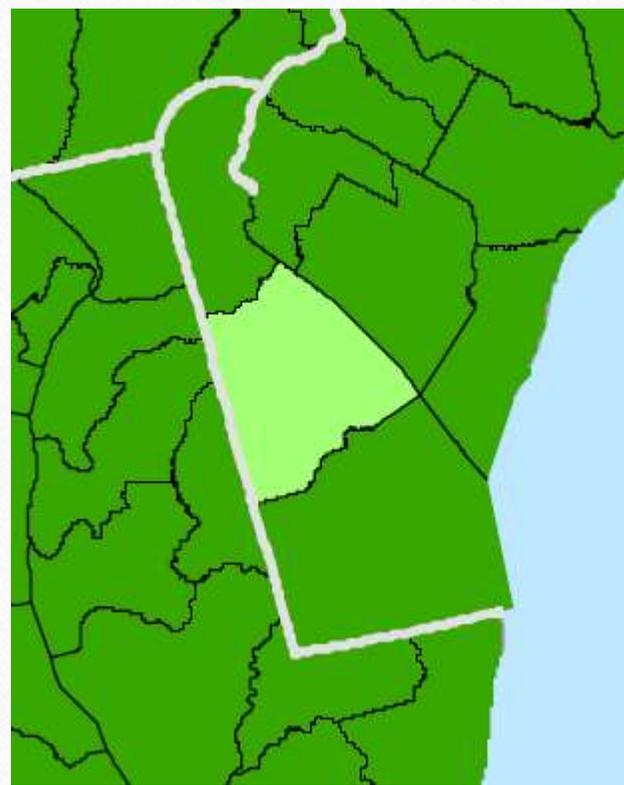
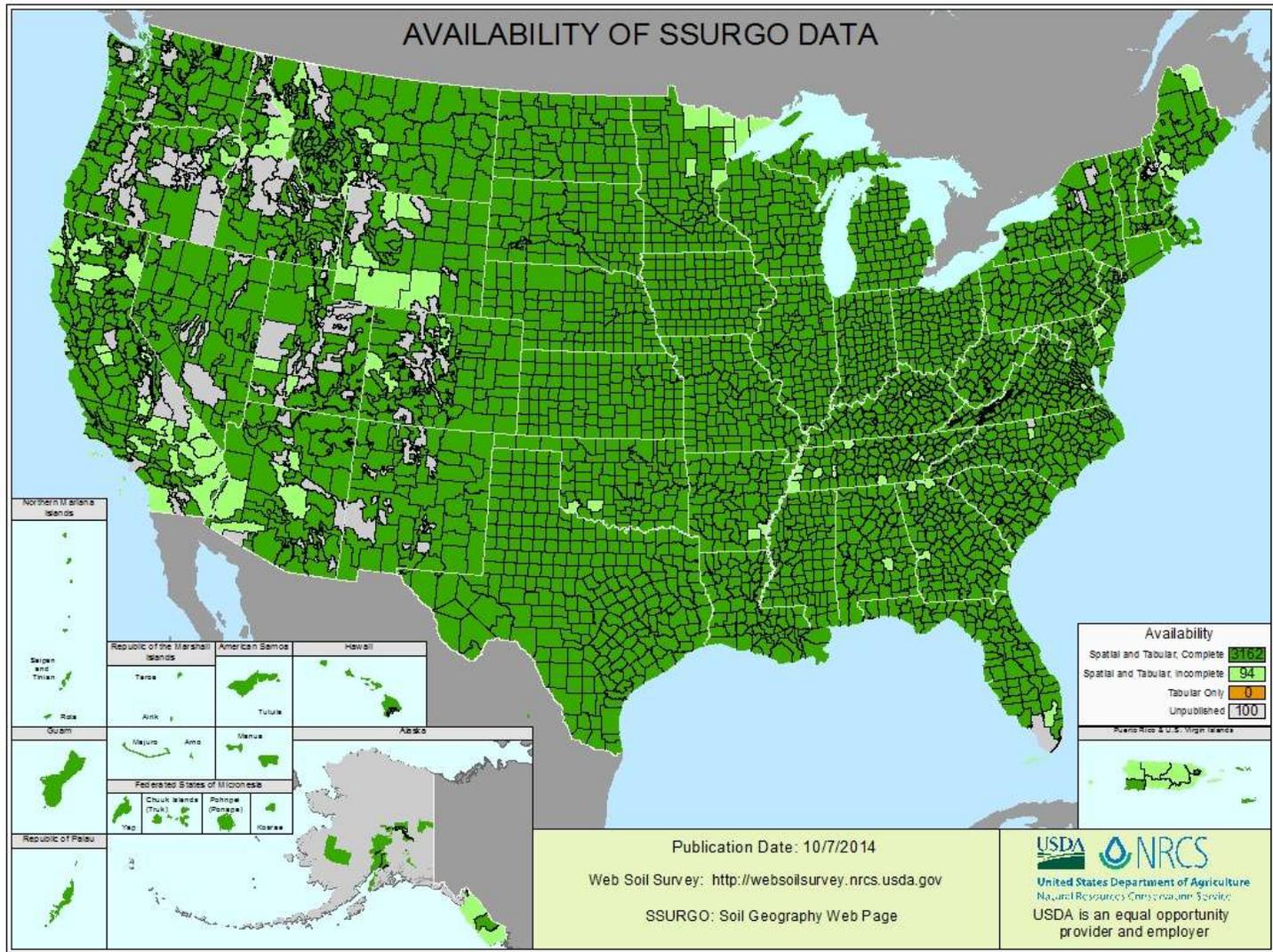
Who Uses Soil Surveys?

- Farmers
- Community Planners
- Realtors
- Homeowners
- Engineers
- Ecologists
- Sanitarians

What is the Web Soil Survey?

- A powerful tool used to analyze soil data
- Soil survey data consists of both spatial and tabular components
- Provides non-GIS and GIS users with electronic access to relevant soil information
- A product of NCSS

AVAILABILITY OF SSURGO DATA



Accessing Web Soil Survey

- <http://websoilsurvey.nrcs.usda.gov>

- Click on



4 Basic Steps

- Define AOI
- View Map and Print Soils Report
- Explore Your Soils Information
- Check Out Items

Define Your AOI

Area of Interest (AOI) | Soil Map | So

Search

Area of Interest

Import AOI

Quick Navigation

Address

State and County

Soil Survey Area

Latitude and Longitude

PLSS (Section, Township, Range)

Bureau of Land Management

Department of Defense

Forest Service

National Park Service

Hydrologic Unit

Area of Interest Interactive Map



View Your Soil Map

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
FaA	Fallsington sandy loam, 0 to 2 percent slopes	0.2	0.1%
FgA	Fallsington loam, 0 to 2 percent slopes	20.7	6.2%
HoA	Hammonton-Fallsington-Mullica complex, 0 to 2 percent slopes	1.6	0.5%
ImB	Ingleside-Hammonton-Fallsington complex, 0 to 5 percent slopes	2.9	0.9%
MtA	Mattapex silt loam, 0 to 2 percent slopes	13.1	4.0%
MtB	Mattapex silt loam, 2 to 5 percent slopes	74.6	22.5%
OtA	Othello silt loam, 0 to 2 percent slopes	1.9	0.6%
SaB	Sassafras sandy loam, 2 to 5 percent slopes	132.6	40.1%
SaC	Sassafras sandy loam, 5 to 10 percent slopes	35.6	10.8%
SaD	Sassafras sandy loam, 10 to 15 percent slopes	38.1	11.5%
Za	Zekiah sandy loam, frequently flooded	9.5	2.9%
Totals for Area of Interest		330.7	100.0%

Report - Map Unit Description

New Castle County, Delaware

FaA - Fallsington sandy loam, 0 to 2 percent slopes

Map Unit Setting
 National map unit symbol: 2p7fq
 Elevation: 0 to 120 feet
 Mean annual precipitation: 42 to 48 inches
 Mean annual air temperature: 52 to 58 degrees F
 Frost-free period: 180 to 220 days
 Farmland classification: Farmland of statewide importance

Map Unit Composition
 Fallsington, undrained, and similar soils: 40 percent
 Fallsington, drained, and similar soils: 40 percent
 Minor components: 10 percent
 Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Fallsington, Drained

Setting
 Landform: Flats, depressions, swales
 Landform position (three-dimensional): Tall
 Down-slope shape: Linear, concave
 Across-slope shape: Linear, concave
 Parent material: Loamy fluvio-marine sediments

Typical profile
 Ap - 0 to 10 inches: sandy loam
 Btg - 10 to 32 inches: sandy clay loam
 BCg - 32 to 39 inches: loamy sand
 Cg1 - 39 to 46 inches: sandy clay loam
 Cg2 - 46 to 80 inches: sand

Properties and qualities:
 Slope: 0 to 2 percent
 Depth to restrictive feature: More than 80 inches
 Natural drainage class: Poorly drained
 Runoff class: Negligible
 Capacity of the most limiting layer to transmit water (Ksat):
 Moderately high to high (0.57 to 1.98 in/hr)
 Depth to water table: About 10 to 20 inches
 Frequency of flooding: None
 Frequency of ponding: Rare
 Available water storage in profile: Moderate (about 8.2 inches)



Explore Your Soil Information

Intro to Soils | **Suitabilities and Limitations for Use**

Search [?]

Suitabilities and Limitations Ratings [?]

Open All **Close All** [?]

- Building Site Development [?] [v]
- Construction Materials [?] [v]
- Disaster Recovery Planning [?] [v]
- Land Classifications [?] [v]
- Land Management [?] [v]
- Military Operations [?] [v]
- Recreational Development [?] [v]
- Sanitary Facilities [?] [v]
- Vegetative Productivity [?] [v]
- Waste Management [?] [v]
- Water Management [?] [v]

Soil Map

Legend [?]

Intro to Soils | **Suitabilities and Limitations for Use** | **Soil Properties and Qualities**

Search [?]

Properties and Qualities Ratings [?]

Open All **Close All** [?]

- Soil Chemical Properties [?] [v]
- Soil Erosion Factors [?] [v]
- Soil Physical Properties [?] [v]
- Soil Qualities and Features [?] [v]
- Water Features [?] [v]

Soil Map

Legend [?]

Scale

Check Out Items

Area of Interest (AOI) | Soil Map | Soil Data Explorer | Download Soils Data | **Shopping Cart (Free)**

Search [?]

Report Properties [?]

Title

Title: Custom Soil Resource Report for New Castle County, Delaware

Subtitle:

Area of Interest Name: (none defined)

Custom Subtitle:

New Castle Soil Map

None

Map Options

Map Scale: Fit to page

Printed Sheet Size: A landscape (11" x 8.5") — 1 sheet

Show UTM Coordinate Ticks:

Table of Contents [?]

- Custom Soil Resource Report for New Castle County, Delaware
 - Cover
 - Preface
 - Contents
 - How Soil Surveys Are Made
 - Soil Map
 - Soil Map
 - Map Unit Legend
 - Map Unit Description
 - Soil Data Explorer
 - All Uses
 - References
 - Glossary

Check Out

Checkout Options [?]

Delivery Options

Select a Delivery Method

Get now

Download later

When your report has been assembled, you will receive a message at the email address you enter, including a URL for your report as a PDF.

Email Address:

Cancel OK

Other NRCS Soil Applications

- Soil Data Mart
- Soil Data Viewer
- SoilWeb

Carrier 10:11 PM

Save SoilWeb for iPhone

GPS Accuracy Threshold (m)

10 250 500 750 1000

outside clear outside covered indoors or dense canopy I feel lucky

SoilWeb is developed and maintained by Dylan E. Beaudette and Anthony T. O'Geen of the Soil Resource Laboratory, Dept. LAWR, UC Davis. Data are provided for educational purposes only, and should not be used for final land-use decisions.

For more information on SoilWeb, please see: [\[link\]](#)

Soil Survey (SSURGO) data was collected from the NRCS Soil-Data Mart. [[link](#)]

California Soil Resource Lab
 Department of **LAND, AIR AND WATER RESOURCES**
 University of California, Davis
 Climate Change • Sustainable Agriculture
 Environmental Quality • Landscape Processes

SoilWeb

Google Earth

Search

Fly To: Find Businesses Directions

Phyto e.g., Reservoir Rd., Clonville, NY
 417 DAVISWAY, CA

mt.tamalpais.ca
 Mt. Tamalpais, Golden Gate
 Ads
[Mount Tamalpais Trail Map](#)
[maps.webcracker.com/](#)
 Find Detailed Maps & Directions
[Mount Tamalpais Trail Map](#)

Layers: Earth Gallery

- Primary Database
- Borders and Labels
- Places
- Photos
- Roads
- 3D Buildings
- Ocean
- Weather
- Gallery

SALPIN-BONNYDOON COMPLEX, 18 TO 20 PERCENT SLOPES

Major Component List for [459454]

Back with: Typo mapmaker
 Elevation (DEM): Elevation mapmaker

Soil Type	Area (sq. ft.)
111	20k
112	10k
113	10k
114	10k
115	10k
116	10k
117	10k
118	10k
119	10k
120	10k
121	10k
122	10k
123	10k
124	10k
125	10k
126	10k
127	10k
128	10k
129	10k
130	10k
131	10k
132	10k
133	10k
134	10k
135	10k
136	10k
137	10k
138	10k
139	10k
140	10k
141	10k
142	10k
143	10k
144	10k
145	10k
146	10k
147	10k
148	10k
149	10k
150	10k

© 2012 Google

Delaware Soil Facts

- Greenwich is Delaware's State Soil
- 80 soil series
- 195 soil map units (soil types)

Partners of NCSS

- Delaware Office of State Planning
- Delaware Department of Agriculture
- Delaware Department of Natural Resources and Environmental Control (DNREC)
- First State Resource Conservation and Development (RC & D) Council
- Delaware Conservation District
- University of Delaware

Important NRCS Soil Acronyms

- NCSS
- NASIS
- NSSC
- NSSL
- SSURGO



SOIL

PITS



Contact Info

Art Walker, GIS Specialist, USDA-NRCS

1221 College Park Drive, Suite 100

302-678-4183

Phil King, State Soil Scientist, USDA-NRCS

1221 College Park Drive, Suite 100

302-678-4172

Questions





ArcGIS Pro: An Introduction

Lauri Dafner

Seth Van Aken

Esri @ DGDC

November 13, 2014

Agenda

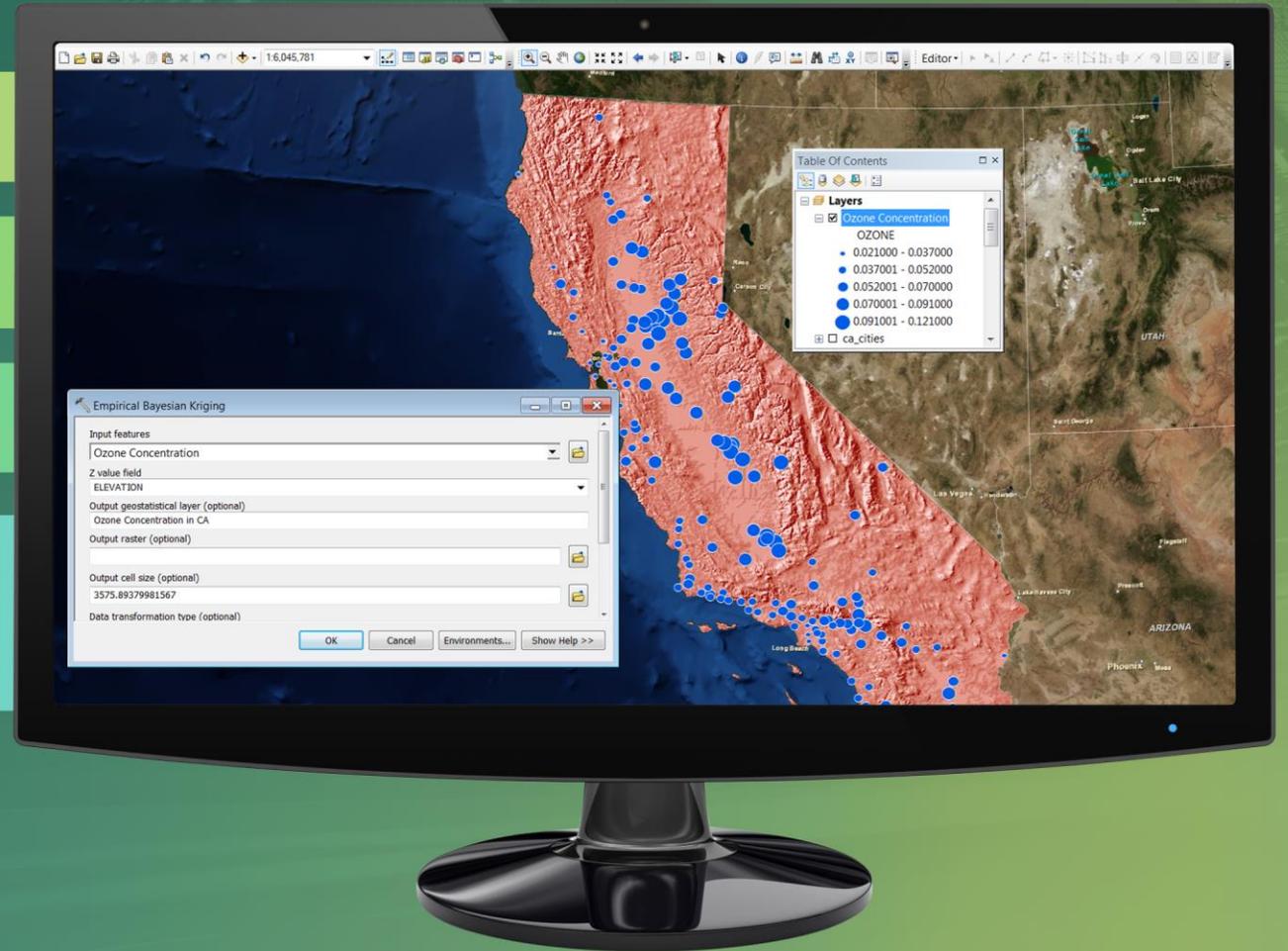
- **Introduction to ArcGIS Pro**
 - **What is ArcGIS Pro?**
 - **Functionality tour**
 - **Licensing**
 - **Additional resources**

Manage your Data

Perform Advanced Analysis

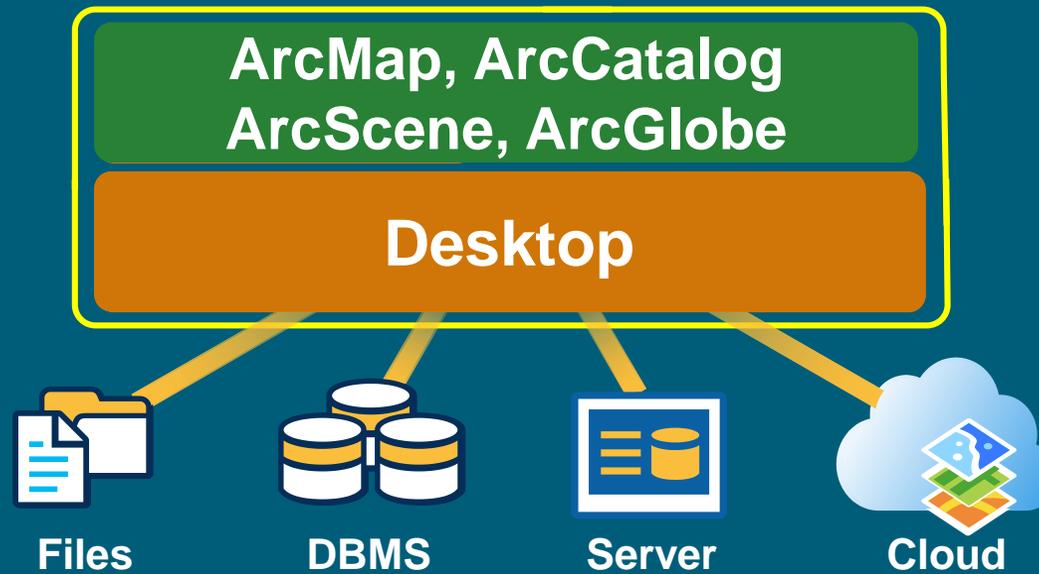
Model and Automate Workflows

Display your results on Professional
Quality Maps



ArcGIS for Desktop *today*

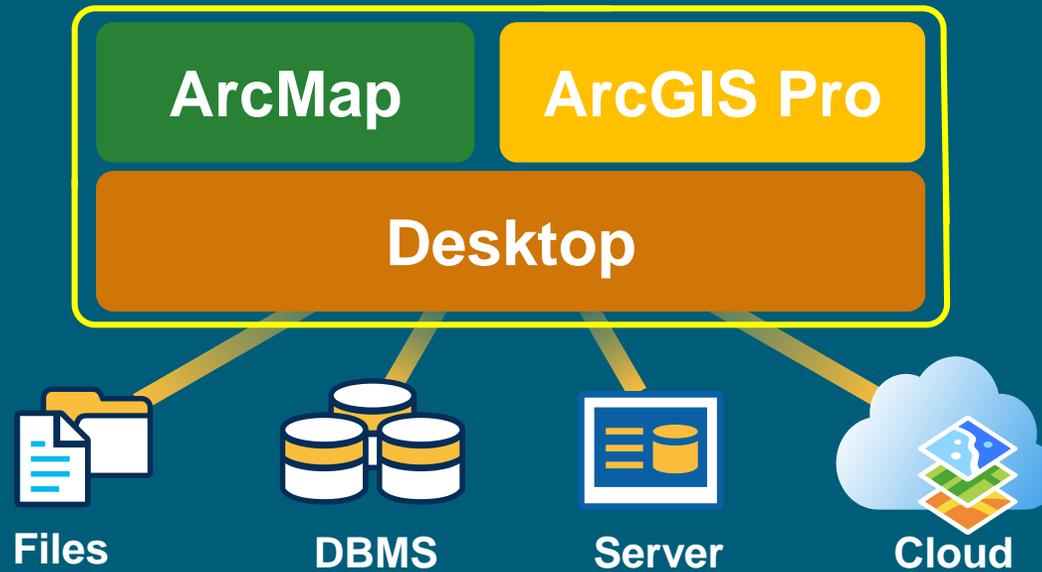
- Current release is version 10.2.2
- Licensed : Basic, Standard, Advanced



ArcGIS Pro

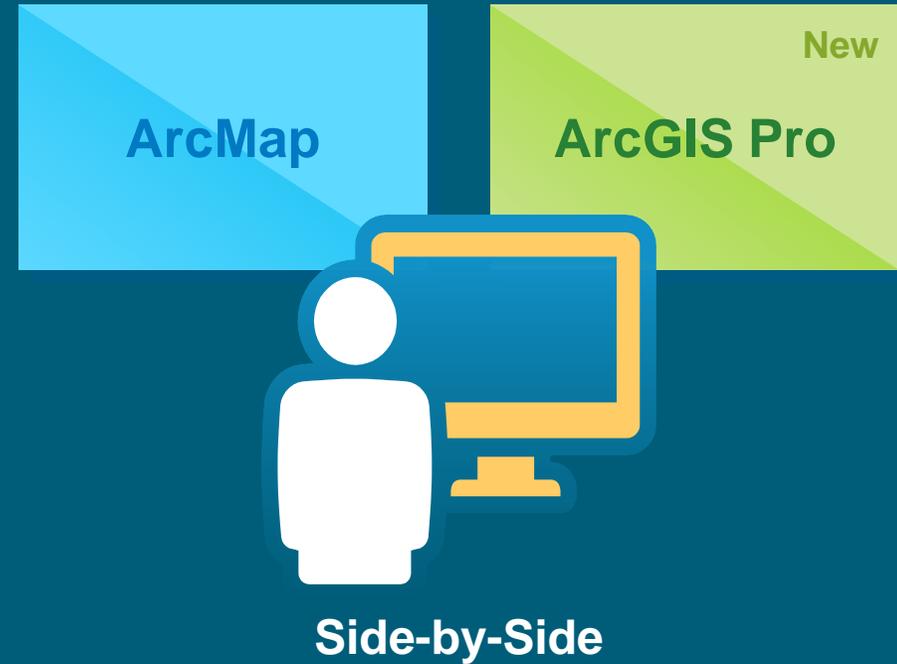
A New Application for Desktop

- Improved User Experience
- Very Fast, 64 bit
- Combined 2D and 3D
- Project focused
- Powerful Analysis
- Multiple Layouts



Is ArcGIS Pro a replacement for ArcMap? No

- It's a new application, not a replacement
- ArcMap continues to get better
- ArcMap and Pro run side by side



Demo: Getting Started

Key ArcGIS Pro Takeaways

- **2D and 3D editing**
- **64 Bit**
- **Multiple layouts**
- **Integration with ArcGIS Online**
- **Customization**
 - Automate with Python
 - Extend using .NET API and SDK
- **Tasks – capture workflow in series of steps and share it**

Getting ready for ArcGIS Pro

Know before you Pro!

ArcGIS 10.3 Pre-release is now available to all current customers!

For ArcGIS Pro (watch [this](#)):

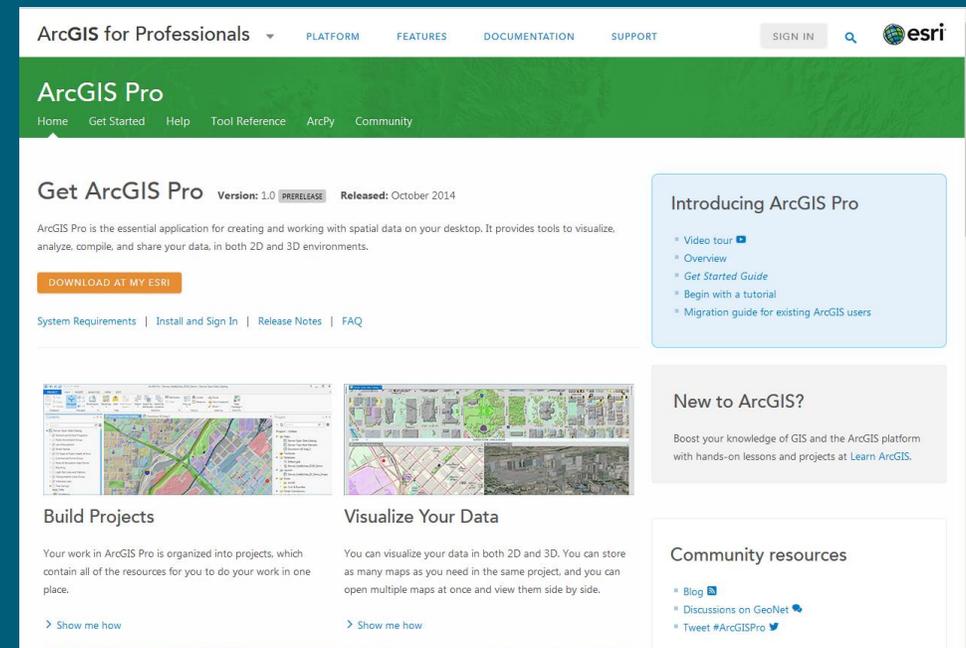
1. Primary Maintenance Administrator:

- Downloads from <http://My.Esri.com>

2. ArcGIS Online Administrator

- Provision licenses for Pro

**Additional Help for current Desktop:
[Upgrading ArcGIS for Desktop 10.3](#)**



The screenshot shows the ArcGIS Pro website landing page. At the top, there is a navigation bar with 'ArcGIS for Professionals' and links for PLATFORM, FEATURES, DOCUMENTATION, and SUPPORT. A search bar and 'SIGN IN' button are also present. Below the navigation bar, the page title 'ArcGIS Pro' is displayed, followed by a sub-navigation menu with 'Home', 'Get Started', 'Help', 'Tool Reference', 'ArcPy', and 'Community'. The main content area features a 'Get ArcGIS Pro' section with a 'Version: 1.0 PRERELEASE' badge and a 'Released: October 2014' date. A description states that ArcGIS Pro is the essential application for creating and working with spatial data on a desktop. A prominent orange button labeled 'DOWNLOAD AT MY ESRI' is visible. Below this, there are links for 'System Requirements', 'Install and Sign In', 'Release Notes', and 'FAQ'. To the right, a 'Introducing ArcGIS Pro' sidebar contains links for a 'Video tour', 'Overview', 'Get Started Guide', 'Begin with a tutorial', and a 'Migration guide for existing ArcGIS users'. Further down, there are two columns of content: 'Build Projects' and 'Visualize Your Data', each with a brief description and a 'Show me how' link. A 'New to ArcGIS?' section offers lessons and projects. At the bottom right, a 'Community resources' section includes links to a 'Blog', 'Discussions on GeoNet', and a 'Tweet #ArcGISPro' link.

Whats New in Training for ArcGIS Pro

- **10.3 New and Updated Courses (Web and Instructor Led)**

- **Getting Started with ArcGIS Pro**

- Anticipated Release Date, Second Quarter of 2015
- Free Web Course (3 hours)
- Highlight the major interface components and workflows for mapping, analysis, and sharing of GIS data
- Quickstart for experienced ArcGIS for Desktop users

- **Introduction to ArcGIS Pro for GIS Professionals**

- Anticipated Release Date, Second Quarter of 2015
- Instructor Led Course (2 Days)
- Familiarize users with essential ArcGIS Pro terminology
- Complete tasks related to mapping, editing, geoprocessing, and analysis
- Prerequisite is ArcGIS 2: Essential Workflows
- Focus for experienced ArcGIS for Desktop users

- *Getting Started for ArcGIS Pro is for the beginning GIS user whereas the Introduction to ArcGIS Pro for GIS Professionals is for more advanced users.

bit.ly/proDELAWARE

 @ArcGISPro



Understanding our world.