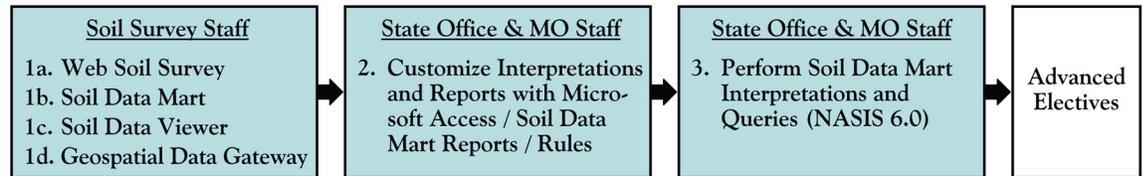


National Soil Survey Center – Executive Summary for GIS Training Soil Application Learning Path (I)



Web Soil Survey (WSS)

Description Web Soil Survey at <http://websoilsurvey.nrcs.usda.gov> is a publicly accessible delivery system for soil survey data and information.

- Learning Objectives**
- Define an area of interest
 - View a soil map
 - Browse/explore soil and related information
 - Generate thematic maps
 - Access Soil Data Mart data tables
 - Print/download selected map and/or report



Instruction Method Job aid in the form of a PDF file on the Web Soil Survey homepage.

Length of Training Approximately 1 hour.

Prerequisites None.

Training User selects an area of interest (AOI) by navigating to an area using an address, county, soil survey area, latitude and longitude, PLSS (Township and Range), or hydrologic unit; then defines the AOI by using tools to draw a polygon. Next, they will view and print a soil map of the AOI. The soil data explorer is opened and instructions are provided for viewing soil suitabilities and limitations. An interactive map is displayed and summary reports are generated providing ratings, an interpretation description, and rating options. Still within the soil data explorer, soil properties and qualities are viewed and results displayed via maps and reports. The user is shown how to change land uses, looking at cropland, forestland, hayland/pastureland, horticulture, rangeland, recreation, and urban. Soil Data Mart report options are reviewed and reports are viewed and saved/printed. The soil survey publication is viewed, if present.

Soil Data Mart (SDM)

Description Soil Data Mart is a publicly available website, at <http://soildatamart.nrcs.usda.gov>, that houses the current soil survey data and information in digital form.

- Learning Objectives**
- Generate standard reports
 - Download SSURGO data via FTP
 - Download Access® template (national or state-specific)

Dwellings and Small Commercial Buildings							
Lancaster County, Nebraska							
[The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. The numbers in the value column range from 0.0 to 1.0. The larger the value, the greater the potential limitation. The table shows only the top five limitations for any given soil. The soil may have additional limitations.]							
Map symbol and soil name	Pit soil	Dwellings without basements		Dwellings with basements		Small commercial buildings	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
B/C Arlington	100	Very limited Shrink-swell	1.00	Very limited Shrink-swell	1.00	Very limited Shrink-swell	1.00
B/D Arlington	100	Very limited Shrink-swell	1.00	Very limited Shrink-swell	1.00	Very limited Shrink-swell	1.00
A4 Wynnew	100	Very limited Shrink-swell Depth to saturated zone	1.00 0.30	Very limited Depth to saturated zone Shrink-swell	1.00 1.00	Very limited Shrink-swell Depth to saturated zone	1.00 0.30
A6 Wynnew	100	Very limited Shrink-swell Depth to saturated zone	1.00 0.30	Very limited Depth to saturated zone Shrink-swell	1.00 1.00	Very limited Shrink-swell Depth to saturated zone	1.00 0.30
WC2 Wynnew	100	Very limited Shrink-swell Depth to saturated zone	1.00 0.30	Very limited Depth to saturated zone Shrink-swell	1.00 1.00	Very limited Shrink-swell Depth to saturated zone	1.00 0.30

Instruction Method Job aid in the form of a Powerpoint® file on the Soil Data Mart homepage.

Length of Training Approximately 1 hour.

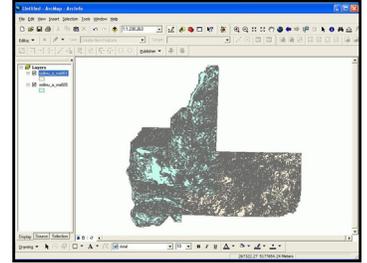
Prerequisites None.

Training User will select an area of interest. The various options are reviewed including view metadata, download data, generate reports, and subscribe. The generate report option includes selecting map units to include, selecting the desired report, viewing the report output, and viewing the report description. The downloading SSURGO data option is then reviewed. Instructions are given for selecting the class of data desired, entering an email address to receive notification that the request has been processed, and submitting the request. The SSURGO metadata for the selected area is viewed. Guidance is provided for subscription notification when your data is updated. The user is shown how to view the state contact list, download empty Access® SSURGO templates, view documentation for SSURGO data, view data availability map, and download STATSGO data via national coverage or selected state extent.

Soil Application Learning Path (I)

Soil Data Viewer (SDV) - Basic

Description	Soil Data Viewer is an extension of ArcGIS® ArcMap and is used in the basic mode to create thematic soil interpretative maps.
Learning Objectives	<ul style="list-style-type: none">▪ Use basic functions of ArcGIS® and Soil Data Viewer to create soil interpretation maps
Instruction Method	Job aid in the form of a User Guide (PDF) on the Soil Data Viewer website.
Length of Training	4-8 hours.
Prerequisites	ESRI “Introduction to ArcGIS® I” (online) or NCGC “Introduction to ArcGIS® I for USDA SCA” with one-day extension for soil survey applications; or be an ArcGIS® user. Should have access to ArcGIS® 9.x.
Training	Participants learn how to obtain and prepare data needed to run SDV. They learn about “aggregation” and the optional methods for aggregation such as no aggregation, dominant condition, dominant component, weighted average, all components, least limiting, most limiting, and absence/presence. They learn how to run SDV standalone, generating a report and a map unit description. They learn how to run SDV as a plug-in under ArcMap, generating thematic maps with interpretive information. They will also learn about the outputs available for aggregation reports, map unit descriptions, and thematic maps. If desired, the learner can review the parts of the SDV interface including the menu bar, main tabs, and controls.



Soil Data Viewer (SDV) - Advanced

Description	Soil Data Viewer, in the advanced mode, can be integrated with other spatial resource data layers in ArcGIS® to aid in resource and environmental assessments, conservation planning, and community and regional planning.
Learning Objectives	<ul style="list-style-type: none">▪ Use Soil Data Viewer advanced techniques for:<ul style="list-style-type: none">– resource assessment– conservation planning– marketing and educational activities▪ Prepare the spatial and tabular data for ArcGIS® and Soil Data Viewer▪ Incorporate Soil Data Viewer output into analysis of resource concerns
Instruction Method	Instructor-led classroom hands-on computer training.
Length of Training	24 hours.
Prerequisites	ESRI “Introduction to ArcGIS® I” (online) or NCGC “Introduction to ArcGIS® I for USDA SCA” with one-day extension for soil survey applications; or be an ArcGIS® user. Should have access to ArcGIS® 9.x.
Training	Participants learn how to link from the “Shapefile” format soil survey map in ArcGIS® to the soil survey attribute data loaded into an Access® database. A soil property or interpretation is selected. Then Soil Data Viewer queries and extracts the soil attribute data from the Access® database, processes and aggregates the results based on user selected method, and joins the processed results with the soil layer in ArcGIS®. The newly created soil thematic map is added with a predefined legend and symbology. Sources of soil data and data preparations (spatial and tabular) are reviewed. Participants learn how to use ArcMap® and ArcCatalog® to digitize features and use the basic geoprocessing commands of clipping, intersecting, and merging soil data layers for spatial analysis. Participants will learn how to create finished soil interpretative maps for a wide range of resource, planning, educational, and marketing products using business cases provided as exercises.

Soil Application Learning Path (I)

Geospatial Data Gateway

Description	The Geospatial Data Gateway at http://datagateway.nrcs.usda.gov provides one-stop-shopping for natural resources or environmental data at anytime, from anywhere, to anyone. The Gateway allows you to choose your area of interest, browse and select data from our catalog, customize the format, and have it downloaded or shipped on CD or DVD.
Learning Objectives	<ul style="list-style-type: none">▪ Locate area of interest▪ Select products▪ Choose format▪ Choose shipping option▪ Confirm order
Instruction Method	Help page.
Length of Training	None.
Prerequisites	None.
Training	No training required. At the site, choose FAQ from the menu bar. Choose Help from the next menu bar. Short, concise instructions are provided for each objective. These same instructions are found as you complete an order step-by-step from the Geospatial Data Warehouse.

Soil Data Access

Description	The Soil Data Mart Data Access suite of applications and web services at http://sdmdataaccess.nrcs.usda.gov allows a user to execute a query against the Soil Data Mart database in either real-time via a web service or via a web application interface as either a real-time request whose results are returned to your web browser or as a queued request whose results are not returned in real-time.
Learning Objectives	<ul style="list-style-type: none">▪ Execute queries against the Soil Data Mart database▪ Return results in 2 different formats
Instruction Method	Three separate “help” sites are provided. <ul style="list-style-type: none">▪ Soil Data Access Query Help▪ Soil Data Access Web Service Help▪ Soil Data Access Help
Length of Training	Self-paced.
Prerequisites	SQL knowledge and experience.
Training	The user learns how to use the site and SQL to access data.

Soil Data Mart Report Manager

Description	Although the name is “Soil Data Mart” report manager, this tool is used to write manuscript reports for Web Soil Survey 2.0. It is not used to write reports for the Soil Data Mart, at this time. It is targeted to the State Soil Scientist offices only.
Learning Objectives	<ul style="list-style-type: none">▪ Install application software▪ Write publication reports for use with the WSS 2.0 manuscript
Instruction Method	Installation and Overview video (without sound) and Demonstration video (with sound).
Length of Training	Self-paced.
Prerequisites	Requires Flash technology.
Training	The State Soil Scientist or representative learner will use the videos to review the processes involved, including how to download the software. Learner may pause the video at any time, and, running the application simultaneously, run through the processes covered.

Soil Data Mart Interpretations and Queries (NASIS 6.0)

Not available.