

For: State Offices

**Notice of Environmental Systems Research Institute (ESRI) ArcGIS-1 Training**

Approved by: Acting Deputy Administrator, Farm Programs



**1 Overview**

**A Background**

ArcGIS is the newest version of Geographic Information Systems (GIS) software from ESRI. FSA plans to replace the current ArcView GIS platform with ArcGIS in late calendar year 2003.

**B Purpose**

This notice informs FSA State Offices that the Service Center Agencies (SCA's) GIS Team is sponsoring introductory training for the ArcGIS software to staff from FSA, Natural Resources Conservation Service (NRCS), and Rural Development. The course will be taught by ESRI instructors at select locations across the country and will be offered from August 2003 through December 2003.

Twenty-five sessions will be offered to State Office staff.

**2 Training Session Information**

**A ArcGIS-1 Training**

Training session will be offered to 2 States at a time and class size is limited to 12 students. To accommodate the limited class size, each SCA State Office may select 2 participants for a total of 6 students attending from each State.

<b>Disposal Date</b>	<b>Distribution</b>
June 1, 2004	State Offices

## 2 Training Session Information (Continued)

### A ArcGIS-1 Training (Continued)

See Exhibit 1 for the training schedule. Because this is a contracted course, States **may not send more than the authorized number of students**. However, if for some reason one Agency determines that they will not use their allotted seats, those seats may be filled with representatives of one of the other SCA's. An additional exception is if one State does not fill all of its slots, it may offer those slots to its partner State. If both States cannot fill all 12 seats, the SCA GIS Team will offer leftover seats to other USDA agencies.

### B Purpose of the Course

- The purpose of this course is to provide participants with an introductory understanding of ArcGIS software and opportunities for its use. The course covers fundamental GIS concepts using spatial data stored in the GEODATA folder structure common to all SCA's. Participants will learn how to create, edit, and work with georeferenced spatial data, with particular emphasis on editing tasks that are common to all SCA workflows. See Exhibit 2 for details.

Course attendance will be useful in helping employees understand how current tabular (text) program information and spatial data (digital imagery) will ultimately be linked in FSA's GIS enterprise applications. FSA will schedule follow-on telephone conferences for participants to provide assistance where necessary and to ensure successful use.

### C Who Should Attend the Course

FSA State Office employees are eligible to apply for this course. FSA-specific ArcGIS tool training will be provided to staff at the County Office level as part of the national ArcGIS deployment plan beginning in early 2004.

SED's shall nominate 2 employees to attend this training. Likely candidates are:

- State Office GIS Coordinators with limited ArcView experience
- State Office program specialists with limited or no ArcView experience and who are interested in using GIS for analysis and graphical representation of program issues
- DD's with limited or no ArcView experience and who plan to use the software for analysis and representation purposes
- other State Office staff that will use GIS for analysis and representation purposes.

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**2 Training Session Information (Continued)**

**C Who Should Attend the Course (Continued)**

This course is not intended for experienced ArcView users who just want to learn how to transition to ArcGIS, nor does FSA plan to use this course for "Train the Trainer" purposes. Support in both these areas will be provided as part of the overall FSA GIS training plan at a later date.

**D Prerequisite**

To provide for trainee success in this course, nominees:

- should have an understanding of the fundamentals of GIS
- **must** have basic PC skills and be proficient with the Windows operating system.

**3 Registration**

**A SED and GIS Coordinator Actions**

Each SCA is responsible for nominating and approving individuals for training. SED shall nominate FSA candidates. After FSA nominations are made, the State GIS Coordinator shall, by e-mail, send students' names, telephone numbers, and e-mail addresses to:

Shirley Hall  
FSA Point of Contact  
Service Center Agency GIS Team  
E-mail: **Shirley.Hall@wdc.usda.gov**  
Telephone: 202-720-3138

Classes begin in August and candidates should be named as soon as possible, particularly in the following States.

Alaska	Idaho	Oregon
Arizona	Kansas	Utah
California	Montana	Washington
Colorado	Nevada	Wyoming

All other States shall relay nominations to Shirley Hall by August 15, 2003.

### 3 Registration (Continued)

#### B State Coordinator Action When FSA Does Not Use All Training Slots

If FSA does **not** use the 2 seats for their State, GIS Coordinators shall contact their counterparts in NRCS and RD to determine whether these seats can be used by the sister agency. NRCS and RD will do the same. If the seats cannot be used in-State, GIS Coordinators shall contact the GIS Coordinator of their partner training State to offer the seats. Notify Shirley Hall at **Shirley.Hall@wdc.usda.gov** as soon as possible if:

- the FSA slots are given another sister agency
- provided to a partner State
- will not be used so that they can be offered to other USDA agencies.

#### C Student Actions

Participants or the State Training Officer shall document this training course by using the Internet Combined Administrative Management System (ICAMS). The ICAMS course number for the course ArcGIS I is 020118.

Participants shall direct questions about processing in ICAMS to:

- their State Training Coordinator
- Bessy Plaza, Training and Development Branch (TDB), HRD at 202-418-9050
- Joe Hoffman, TDB, HRD at 202-418-9048.

### 4 Software Needs

#### A Installing Software

FSA will deploy ArcGIS software to all offices at the end of calendar year 2003. However, limited copies of the software is available for early installation for ArcGIS I trainees and other justifications. ITSD will receive a list of all training participants and send them a copy of the software.

Training participants shall contact IT staff at the State Office upon receipt of the software to request installation. IT staff are authorized to load ArcGIS software on participant's workstation. Participants shall contact a FSA State Geodata Team representative if they have specific data needs after they complete the course.

## 5 Travel Authorization

### A Approval

Travel is authorized for this training for FSA staff as nominated by SED. Travelers are responsible for all travel arrangements, including hotel and local transportation arrangements.

Depending on the geographic location of States partnered to attend the training, courses will be held at:

- ESRI training facilities
- FSA Aerial Photography Office in Salt Lake City
- NRCS National Cartographic and Geospatial Center in Fort Worth.

Addresses for all ESRI facilities are on the ESRI website at:

**<http://www.esri.com/training/trainingmaps/trainingmaps.html>**

Travel for Federal State Office participants shall be charged to Washington–controlled State Travel Funds.

### B Per Diem Rates

Current per diem rates for each class location can be found on the following website:

**<http://policyworks.gov/org/main/mt/homepage/mtt/perdiem/perd03d.html>**

Participants should present their USDA identification badge to receive the Government per diem rate.

## ArcGIS 1 Training Schedule for State Offices

<b>Start Date</b>	<b>End Date</b>	<b>Location</b>	<b>USDA-SCA State Participants</b>
8/11/03	8/12/03	ESRI—Broomfield, CO	CO, WY
8/13/03	8/14/03	ESRI—Broomfield, CO	KS, AZ
8/18/03	8/19/03	ESRI—Olympia, WA	AK, WA
8/21/03	8/22/03	ESRI—Olympia, WA	OR, CA
8/25/03	8/26/03	Salt Lake City APFO	UT, ID
8/27/03	8/28/03	Salt Lake City APFO	NV, MT
9/15/03	9/16/03	ESRI—Minneapolis, MN	ND, SD
9/17/03	9/18/03	ESRI—Minneapolis, MN	MN, WI
9/23/03	9/24/03	Ft. Worth, NRCS	OK, TX
10/01/03	10/02/03	ESRI—Minneapolis, MN	MI, NE
10/06/03	10/07/03	ESRI—Vienna, VA	VA, WVA
10/08/03	10/09/03	ESRI—Vienna, VA	MD, DE
10/14/03	10/15/03	ESRI—Charlotte, NC	NC, SC
10/16/03	10/17/03	ESRI—Charlotte, NC	FL, PR
10/20/03	10/21/03	ESRI--St. Louis, MO	MO, IL
10/21/03	10/22/03	Ft. Worth, NRCS	LA, AR
10/22/03	10/23/03	ESRI--St. Louis, MO	IA, IN
10/23/03	10/24/03	ESRI—Boston, MA	RI, CT
11/03/03	11/04/03	ESRI—Boston, MA	MA, ME
11/04/03	11/05/03	Ft. Worth, NRCS	MS, NM
11/05/03	11/06/03	ESRI—Boston, MA	VT, NH
11/13/03	11/14/03	ESRI—Charlotte, NC	GA, AL
11/17/03	11/18/03	ESRI—Philadelphia, PA	PA, OH
11/19/03	11/20/03	ESRI—Philadelphia, PA	NY, NJ
11/24/03	11/25/03	ESRI—Charlotte, NC	KY, TN
12/01/03	12/02/03	Hawaii, NRCS/FSA ( <b>Site TBD</b> )	HI, Guam

## Introduction to ArcGIS 1 for USDA-SCA

### A Overview

This 2-day course introduces USDA-SCA participants to ArcGIS and provides the foundation for becoming a successful ArcView, ArcEditor, or ArcInfo user. Participants learn how to use ArcCatalog, ArcMap, and ArcToolbox and explore how these applications work together to provide a complete GIS software solution. The course covers fundamental GIS concepts using spatial data stored in the GEODATA folder structure common to all SCA's. Participants will learn how create, edit, and work with georeferenced spatial data, with particular emphasis on editing tasks that are common to all SCA workflows. Additional topics include querying a GIS database, a survey of common data formats, and how to present spatial data clearly and effectively with maps.

### B Goals

- Become familiar with the SCA GEODATA folder structure
- Display feature and tabular data
- Work with georeferenced spatial data
- Query features using logical expressions
- Find features using spatial relationships
- Understand the USDA form for metadata
- Edit spatial and attribute data
- Produce maps

### C Topics Covered

- ArcGIS overview: Capabilities and applications; Interacting with the interfaces; Basic display.
- Spatial data concepts: Representing spatial data and descriptive information.
- ArcGIS data model: Geodatabases; Shapefiles; Coverages; Feature types; Attributes.
- GIS software: Components; Functions; Applications.
- Spatial coordinate systems and map projections: Georeferencing data; What map projections are; How ArcMap works with map projections.
- Querying data: Selecting and identifying features.
- Map displays: Creating; Symbolizing; Scaling; Adding map elements.