



# CSISS Resources for Research and Teaching

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Center for Spatially Integrated Social Science

University of California, Santa Barbara

Montreal 26 July 2003

*Workshop on Spatial Analysis for Rural  
Sociology  
and Agricultural Economics*



# What is CSISS?

- NSF Funding to support national infrastructure for *Spatial Social Science*
- Oct 1999 to Sept 2004 (~\$4.5 million)
- NCGIA / ISBER, University of California, Santa Barbara
- PI – M.F. Goodchild, Co-PI – R.P. Appelbaum
- PI – tools development, Luc Anselin, UIUC
- Chair of Advisory Board – B.J.L. Berry
- Program Director – D.G. Janelle

# Consortium of Social Science Associations

- **Anthropology**
- **Economics**
- **History**
- **Political Science**
- **Psychology**
- **Criminology**
- **Sociology**
- **Geography**
- **Law**
- **Linguistics**
- **Communications**
- **Statistics**
- **History of Science**
- **Agricultural Economics**
- **Public Opinion Research**
- **Operations Research and Management Science**
- **Public Affairs and Administration**
- **Regional Science**
- **Area Studies**
- **Population Studies**
- **Women's Studies**
- **Child Development**
- **Religious Studies**

# Social Science Infrastructure

Enhancing shared resources for research and learning – **the NSF View**

- Data and tools
- Human resources - training, education
- Communication - linkages, networks, collaboration
- Outreach - accessibility and dissemination



# Spatial Social Science The CSISS Perspective

- **Views space as integrating social processes**
- **Sees social science problems as processes in place**
- **Uses GIS to integrate data by location**
- **Uses spatial analysis to integrate multi-discipline views**

**Critical Themes in Social Science**

Crime & Law Enforcement    Space-Time Accessibility    Urban & Regional Issues    Cultural Analysis    Health & Disease

Equity    Externalities    Globalization    International Conflict    Community Organization

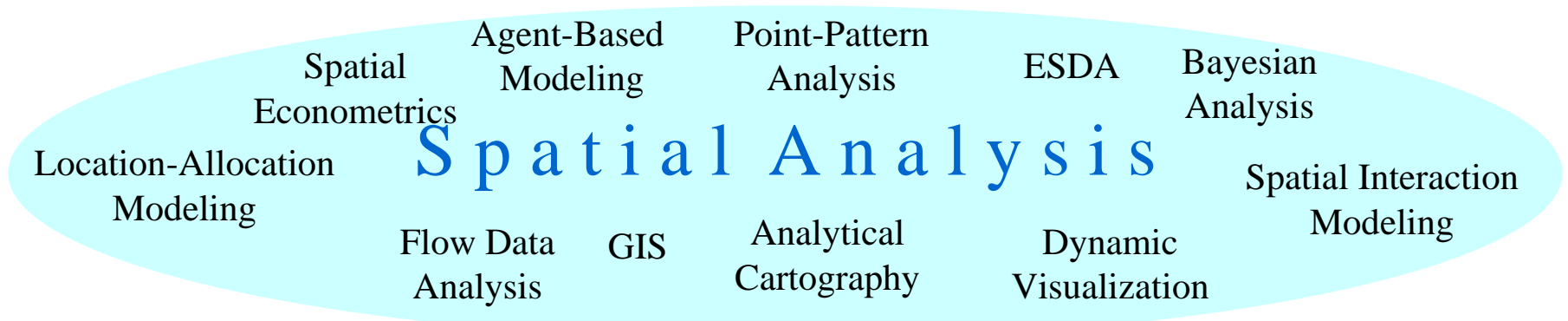
Population & Demographic Issues    Risk Theory    Small-Area Analysis

Governance

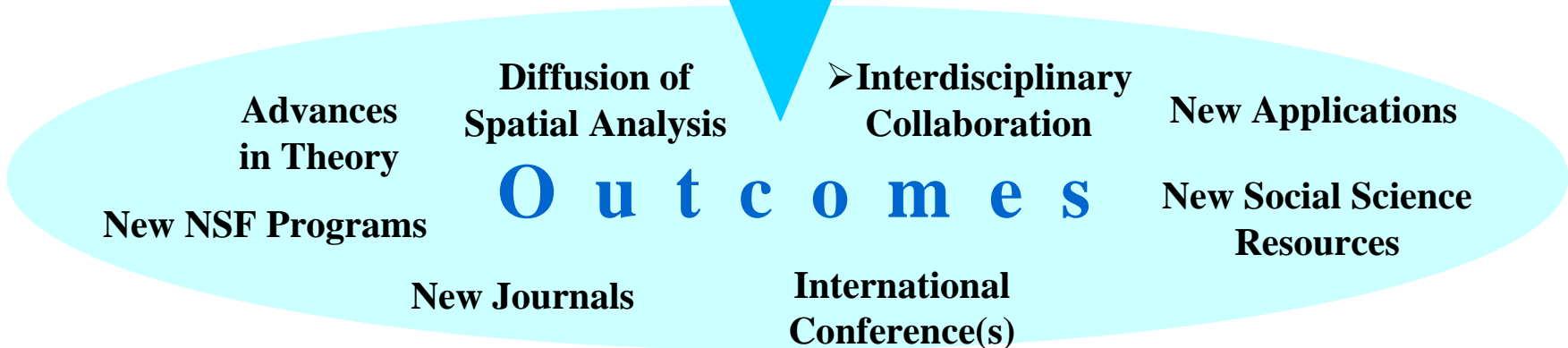
**Key Investigators**

**CSISS Specialist Meetings**

**Tools Development**    **Workshops**    **Learning Resources**    **Best-Practice Publications**



- Specialist Meetings
- Tools Development
- Best-Practice Publications
- Virtual Community
- Workshops
- Learning Resources
- Internet Portal
- Place-Based Search



# Human and Social Dynamics

NSF Directorate for Social, Behavioral, and Economic  
Sciences Funding Priorities 2003 - 2008

1. Enhancing human performance (2003)
2. Decision making under uncertainty (2003)
3. Agents of change
4. Modeling human and social dynamics (Empirical Implications of Theoretical Models (2003)
5. Spatial Social Science
6. Instrumentation and data resource development

2003 NSF Guidelines:

<http://www.nsf.gov/pubs/2003/nsf03552/nsf03552.htm>





**The CSISS Mission** recognizes the growing significance of space, spatiality, location, and place in social science research. It seeks to develop unrestricted access to tools and perspectives that will advance the spatial analytic capabilities of researchers throughout the social sciences. CSISS is funded by the [National Science Foundation](#) under its program of support for infrastructure in the social and behavioral sciences.

**CSISS News**

[CSISS Workshop at ASA 2003 Annual Meeting](#)

Core Programs	Learning Resources	Spatial Resources	Spatial Tools
<p>These six infrastructure programs form the core of the Center's activities.</p>	<p><a href="#">CSISS Classics</a>  <a href="#">GIS Cookbook</a>  <a href="#">ARGUS Activities &amp; Readings</a></p>	<p>CSISS has compiled e-journals, bibliographies, and other spatial resources for the social sciences.</p>	<p>Here's where you'll find information about software for the exploration and analysis of spatial data.</p>
Search Engines	<p><a href="#">NCGIA Core Curriculum</a> ▶  <a href="#">Course Syllabi</a> ▶  <a href="#">Workshop Video Clips</a> ▶  <a href="#">Presentations</a> ▶                      and specialist meetings.</p>	Community Center	About CSISS
<p>Try out one of our custom search engines to find spatial analysis resources on the Internet.</p>		<p>Join the forums, or if your organization relates to our mission and goals, register as a CSISS affiliate.</p>	<p>CSISS personnel, news, site map and FAQ. Our Strategic Plan and Annual Reports are also found here.</p>

[Core Programs](#) | [Learning Resources](#) | [Spatial Resources](#) | [Spatial Tools](#) | [Search Engines](#) | [CSISS Events](#) | [Community Center](#) | [About CSISS](#)  
[Site Map](#) | [Site Search](#) | [Contact CSISS](#) | [Plug-ins](#) | [Privacy Policy](#) | [Site Credits](#) | [Home](#)

# Learning Resources

[CSISS Classics](#)

[GIS Cookbook](#)

[ARGUS Activities & Readings](#)

[NCGIA Core Curriculum](#) ▶

[Course Syllabi](#) ▶

[Workshop Video Clips](#) ▶

[Papers & Presentations](#) ▶

# Center for Spatially Integrated Social Science

## CSISS Classics

The foundations of spatial analysis span many disciplines over many generations of researchers and practitioners. **CSISS Classics** provides summaries and illustrations of major contributions to spatial thinking in the social sciences. Primary emphasis is given to research before 1980, with an attempt to capture and acknowledge the repository of spatial thinking in the social sciences for the last few centuries. The summaries, along with key references, are intended as guides for those interested in exploring intellectual inheritance from previous generations.





## Robert W. Fogel: *The Argument for Wagons and Canals*, 1964. By John Corbett

### *Background*

Robert W. Fogel (born 1926) is best known as the leading proponent of revisionistic economic analysis of some of the most cherished assumptions of American history. Dubbing his technique "cliometrics," Fogel introduced cost/benefit analysis, depreciation, and value added considerations into the area of historical study. In 1964, in his book *Railroads and American Economic Growth*, Fogel attacked the commonly-held notion that the development of the railroad network was a turning point in the economic development of the United States. A decade later, Fogel raised a storm of controversy with his book *Time On The Cross: The Economics of American Negro Slavery*, in which he concluded that slavery was a far more profitable economic institution than had been previously thought. Various holding professorships at the University of Chicago and Harvard University, Fogel has been President of the Economic History Association and of the Social Science History Association. In 1993, Fogel belatedly received the Nobel Prize in Economics for his studies in railroads and slavery.





## Zvi Griliches: The Diffusion of Hybrid Corn Technology, 1957 By Nina Brown

### Background

Griliches, Zvi (1930-1999)

Born in Lithuania, Griliches was a holocaust survivor who lost his parents in the Dachau concentration camp. Following the liberation of the camp in 1945, Griliches was sent to a British internment camp where he taught himself to read English. He later gained admittance to Hebrew University and then transferred to the University of California, Berkeley, where he majored in Agricultural Economics and earned an M.S. degree. He completed a PhD at the University of Chicago and joined the economics faculty there, later moving to Harvard University, where he taught until his death. Griliches was an innovative scholar who specialized in studying the economic impacts of technological innovation. He published numerous books and papers on subjects such as the impact of new technologies on industrial productivity and the rate of return to investments in higher education. As a member of the Boskin Commission appointed by Congress in 1996, he helped to develop new methods

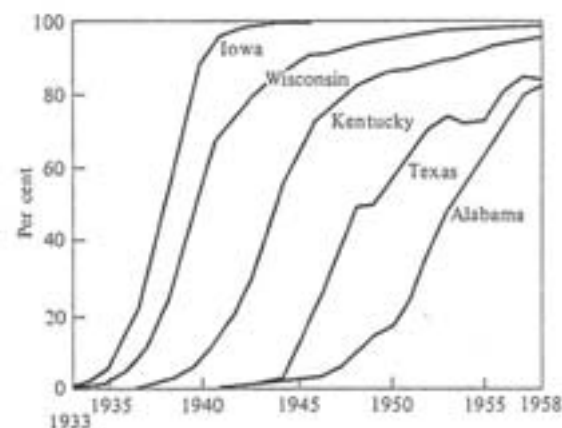


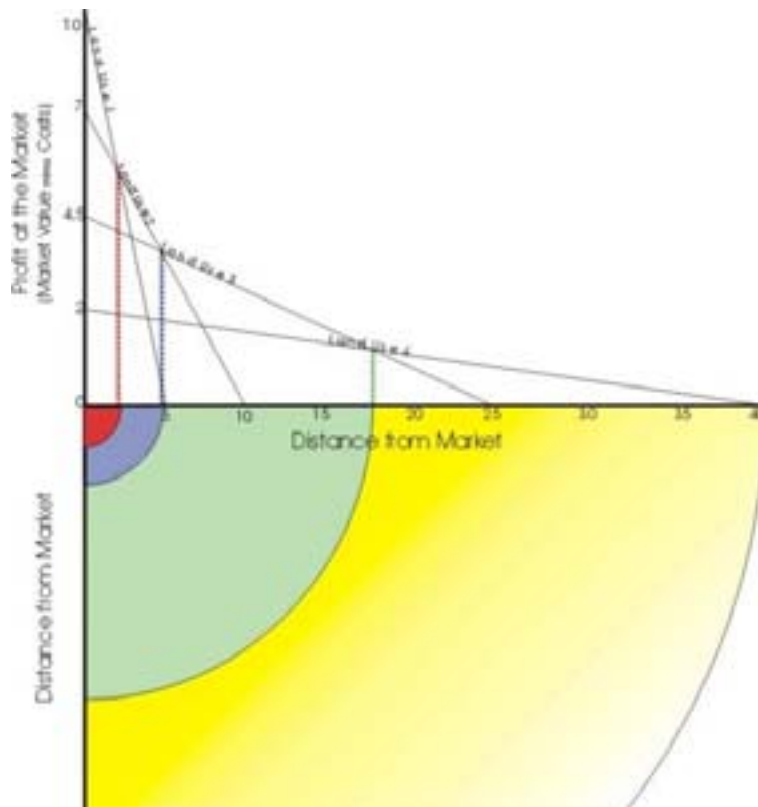
Figure 1. Percentage of All Corn Acreage Planted to Hybrid Seed.

# Johann-Heinrich von Thünen: Balancing Land-Use Allocation with Transport Cost

By Scott Crosier

## Background

In the early 1800s a North German estate owner, Johann-Heinrich von Thünen (1738-1850), sought to determine the most profitable land use for his estate. He collected information that would later be published in *Der isolierte Staat* (1826 "The Isolated State") In this work, von Thünen developed one of the first models to describe the land use practices radiating out from a central market location.

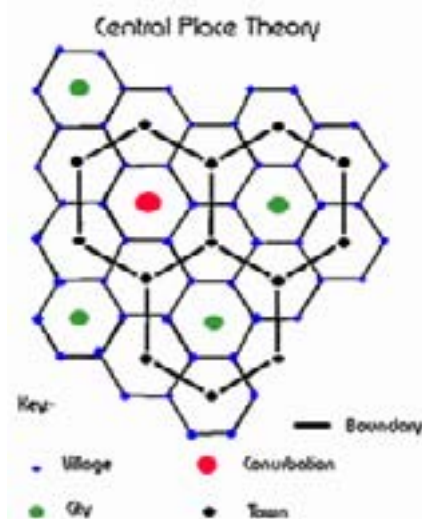


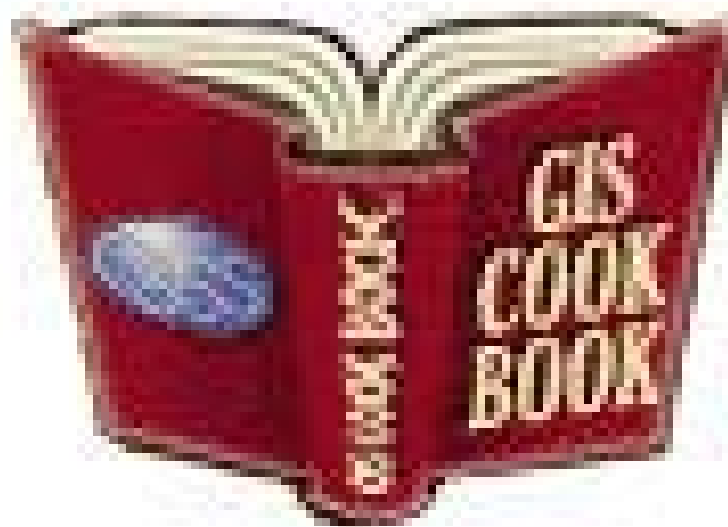
## Walter Christaller: Hierarchical Patterns of Urbanization By Pragma Agarwal

### *Background*

The size distribution of urban locations has been a significant question in urban science. Walter Christaller, a German geographer, originally proposed the Central Place Theory (CPT) in 1933 (trans. 1966). Christaller was studying the urban settlements in Southern Germany and advanced this theory as a means of understanding how urban settlements evolve and are spaced out in relation to each other. The question Christaller posed in his landmark book was 'Are there rules that determine the size, number and distribution of towns?' He attempted to answer this question through a theory of central places that incorporated nodes and links in an idealistic situation.

The model in CPT is explained using geometric shapes, such as hexagons and triangles. Similar to other location theories by Weber and Von Thunen, the locations are assumed to be located in a Euclidean, isotropic plane with similar purchasing power in all directions. The assumption of universality in the transport network was also established and all parts of the plain were served by the central place. A Central Place is a settlement or a nodal point that serves the area around with goods and services (Mayhew, 1997). Christaller's model also was based on the premise that all goods and services were purchased by consumers from the nearest central place, that the demands placed on all central places in the plain were similar, and that none of the central places made any excessive







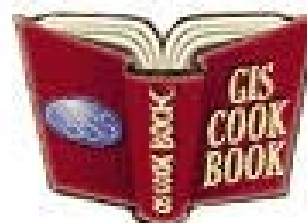
## GIS Cookbook: Contents

- Backgrounds provide brief statements about when to use different GIS tools, the components of each tool, and discussions on the pros and cons of using the tool.
- Getting Started recipes are intended to help users who are unfamiliar with the basics of GIS software. They include short explanations on how to complete common tasks, such as how to add data or open a new view.
- Recipes are step-by-step lessons that guide users through basic spatial analysis and mapping procedures. Screen shots and examples are provided for clearer instruction. Recipes cover six of the most basic elements of spatial analysis and mapping -- geocoding, buffers, projections, datums, density estimation, and census tracts.
- Glossary Terms are GIS terms used within recipes that may be unfamiliar to new users of GIS. Underlined terms are hyperlinked to definitions that appear in



## GIS Cookbook: Recipes

- [Buffering an Area \(ArcView 3.2\)](#)
- [Selecting From Geocoded Addresses \(ArcView 3.2\)](#)
- [Classifying Data \(ArcView 3.2\)](#)
- [Reprojecting Data \(ArcView 3.2\)](#)
- [How to Geocode Addresses \(ArcGIS 8.1\)](#)
- [How to Geocode Addresses \(ArcView 3.2\)](#)
- [Creating a Report \(ArcView 3.2\)](#)
- [Buffering an Area \(ArcGIS 8.1\)](#)





## GIS Cookbook: Recipe - Classifying Data (ArcView 3.2)

**Keywords:** Census tract, census data, classification, reclassification, nominal data, interval data, null value

**Category:** Census Data

**Software:** ArcView 3.2

**Problem:** I have a shapefile of census tracts with attributes, how do I classify the data?

**Description:** When a shapefile is being displayed on your view, it usually displays in one color. This is because the information has not been classified by any one category. When information has been classified, it means it will display different colors to represent different values within a category in its attribute table. For example, if a census tract were to be displayed according to age, it may result in an image where red would stand for a tract with average age >60, orange is 50-60, yellow is 40-50, etc. When classifying data, you can also choose what range you would like to display in what colors.

### **Scenario:**

In this recipe, you will learn how to classify and display census tracts according to average age within each tract.

### **Methodology:**

1) Create a new View and add your census tract shapefile to your View by using the Add Data button



# GIS Cookbook: Recipe - Buffering an Area (ArcGIS 8.1)

**Keywords:** buffers, impact, assessment

**Category:** Buffers

**Software:** ArcInfo 8

**Problem:** You want to buffer an area of influence around an object at a given distance.

**Description:** A buffer is an area around a geographic object and is used to portray an influence boundary, which allows an analyst to perform analysis on what is contained inside and outside of a specified radius. Buffers can be spheres of influence around geographic objects or zones of protection.

**Methodology:**

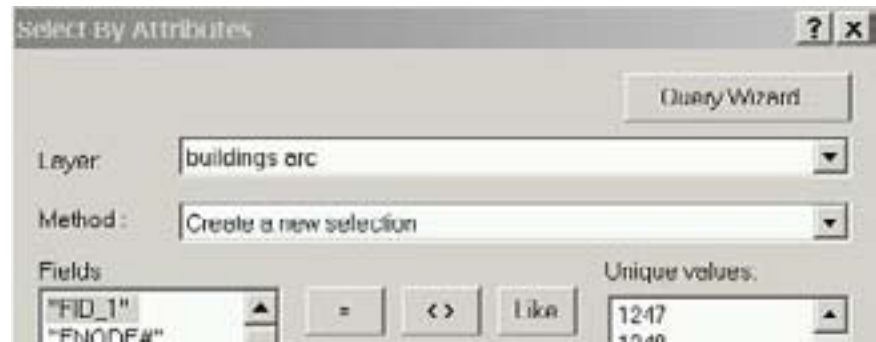
1) Open ArcMap.

2) Add your datasets. If you need assistance with adding your data, see [Add Data](#).

3) Click to highlight the layer that contains the feature to be buffered.

To buffer a feature in a layer without buffering the entire layer go to **Selection**. Scroll down to **Select by Attributes**.

Enter the **Fields** and **Unique Values**.





## Center for Spatially Integrated Social Science

### Course Syllabi From Leading Researchers in Spatial Social Science

[Anthropology](#) • [Archaeology](#) • [Criminology](#) • [Demography](#) • [Economics](#)  
[Environment & Resources](#) • [Geographical Information Science](#)  
[Human Geography](#) • [History](#) • [Political Science](#) • [Public Health](#) • [Sociology](#)  
[Spatially Integrated Social Science](#) • [Urban Studies & Urban Planning](#)

This page provides links to reading lists of courses taught by leading researchers in spatial social science, organized by discipline. The links are provided with the permission of the researchers themselves. In most cases these researchers are not directly affiliated with CSISS; in all cases the researchers are considered by CSISS to be leaders in the analysis of space within their discipline.



Know of a course in the social sciences related to the analysis of space? [Let us know.](#)

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## **Global Positioning Systems**

<http://www.css.cornell.edu/courses/465/css465.html>

This course is an introduction to navigation-grade Global Positioning System (GPS) instruments used in agriculture and environmental science. Emphasis is placed on instrument familiarization, field data collection and processing, real-time and post-differential correction, and GPS-GIS integration. The course is designed to be a very practical, hands-on experience with GPS instruments used for field-based survey and mapping of plots, fields, boundary conditions, and other bio-physical features. The Course Objectives are 1) Familiarization of GPS instruments in a field setting; 2) Collection of position data and feature boundary definition; 3) Correction of position data using various methods; 4) Transfer of data from a GPS environment to a GIS environment; 5) Estimation of area and perimeter of delineated feature(s); and 6) Production of maps depicting spatial location and extent of delineated feature(s)

**Arthur J. Lembo, Jr. and Stephen D. DeGloria, Department of Crop and Soil Sciences, Cornell University**

# Search Engines

Internet Search

Site Search

Social Science Data  
Search 

Spatial Tools Search  
Engine

Literature Search

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# CSISS Web Search Engine

- Building databases of web sites –  
Thunderstone's Taxis Webinator – web walking and indexing software (seeded with ~1500 terms related to spatial social science)
- About 36,000 websites / updated weekly
- User Searchable via keyword entries or access via directories



You Searched  for :

[Find Publications Related to:](#)

[rural-migration](#)

1-10 of 44 results for rural-migration

**1) [Part 4: Discussion-The Population Dynamics Behind Suburban Sprawl](#)**

Another example is the VMT per person and any increases in this measure. Since two year olds do not drive, is it a valid argument to assess vehicle miles traveled to said two year old? Logic would say that a two year old does require specific trips by a licensed...

<http://envstudies.brown.edu/thesis/2001/tbolioli/thesis/html/part4.html>

**2) [Part 2: Research Design and Methods-The Population Dynamics Behind Suburban Sprawl](#)**

Urban and Non-Urban as well as Urban Core, Urban Ring, Sub-Urban and Rural. These classifications were made based on the municipality in the 1990's and were not changed throughout the entire time period covered by the study. Note again that the US Census definitions...

<http://envstudies.brown.edu/thesis/2001/tbolioli/thesis/html/part2.html>

**3) [Work and Mobility: Recent Labour Migration Issues in China - Working Paper 6](#)**

The papers in this volume were originally presented at a series of migration research workshops funded by the Japan Foundation in 1997 and 1998. The workshops were organised by members of the Asia Pacific Migration Research Network in the People's Republic of China...

<http://www.unesco.org/most/apmrpap6.htm>

**4) [Queen's University Belfast - School of Geography](#)**

Your browser does not support these. However, the site may still be accessed (but with reduced functionality) by clicking here...

**5) [Abstract-The Population Dynamics Behind Suburban Sprawl](#)**

Abstract No clear consensus has been reached with regards to the causes of suburban sprawl and those that have ventured ideas mostly settle on some type of behavioral change as the reason. The research presented here seeks to determine if demographic factors have...

<http://envstudies.brown.edu/thesis/2001/tbolioli/thesis/html/abstract.html>

**6) [Population Index - Volume 56 - Number 1](#)**

Studies that treat quantitative data on migration analytically. Methodological studies concerned primarily with migration are coded in this division and cross-referenced to N. Methods of Research and Analysis Including Models, as appropriate. Includes some consideration...

<http://popindex.princeton.edu/browse/v56/n1/h.html>



## CSISS Tools Clearinghouse

The *CSISS Tools Clearinghouse* is intended to grow into a robust collection of spatial analysis software, software links, and links to information about tools for spatial analysis. The development of these tools is a lively research area and the goal of this clearinghouse is to provide up-to-date information on available tools. The clearinghouse is comprised of:



- ◊ **[Search Engine](#)**

Search a continuously updated, comprehensive index of the CSISS Select Tools and Links to Portals.

- ◊ **[Select Tools](#)**

Browse through tools particularly suited to the analysis of spatial phenomena.

- ◊ **[Portal Links](#)**

A listing of useful collections of software tools for anyone interested in Spatial Analysis, or those looking for specific tools.

- ◊ **[CSISS Tools](#)** (offsite)

The home of the software tools development efforts under CSISS, carried out in the Spatial Analysis Laboratory of the Department of Agricultural and Consumer Economics at the University of Illinois, Urbana-Champaign.

**New** - [GeoDa 0.9](#), beta release software for ESDA with dynamically linked windows.

**New** - [R-Gen](#), a developing effort to promote spatial data analysis software in the R language

A white rectangular search box with the text 'Site Search' in a simple, black, sans-serif font.

Site Search







## GeoDa™ 0.9.3 - ESDA with Dynamically Linked Windows

### Description

GeoDa, the Geodata Analysis software is the successor to and a replacement for DynESDA2 and the DynESDA extension for [ESRI's ArcView 3.x GIS](#). It is a freestanding program, built on [ESRI's MapObjects LT2 technology](#), using the shape file format as the standard for storing spatial information.

GeoDa consists of an interactive environment that combines maps with statistical graphics, using the technology of dynamically linked windows. Besides its mapping functionality (including smoothers for rate maps) it contains the usual EDA graphs (histogram, box plot, scatterplot) and implements brushing for both maps and statistical plots. Maps can be constructed for points as well as polygons, and tools are provided to create one from the other (centroid computation, Thiessen polygons), as well as to construct various types of spatial weights. In addition, GeoDa contains a Moran scatterplot and LISA maps, both univariate as well as bivariate.

GeoDa 0.9 beta was released in early February, 2003, and is available for downloading from this site. The beta release is free for non-commercial use only. Make sure to read and accept the terms of the license before installing the software.

To obtain the software, click on the link below and save the setup.exe file in a designated directory. Double-click on the file in explorer or "run" the setup.exe and the installer will start. You are given the option to change the directories in which the program and sample data will be stored. Please ignore the very last screen (the one about updates).

Make sure to subscribe to the [Openspace mailing list](#) to find out about bug fixes and new releases.

[Download GeoDa 0.9.3 Installer](#)

[Upgrade from GeoDa 0.9 beta](#)

## GeoDa

- [About GeoDa](#)
- [Tutorials](#)
- [Sample Data](#)
- [New in GeoDa 0.9.3](#)
- [Upgrade to GeoDa 0.9.3](#)
- [Download Geoda 0.9.3](#)

# Spatial Tools Search Engine

Word count: 'spatial autocorrelation': 35

Documents 1 - 10 of about 35 matching the query, best matches first.

## [Analysis of spatial autocorrelation of USGS 1:250000 digital elevation models](#)

Jay Lee and Louis K. Marion Department of Geography Kent State University Kent, OH 44242-0000  
paper describes the results of performing numerical analyses of spatial autocorrelation on 1:250,000  
<http://spatialodyssey.ursus.maine.edu/gisweb/spatdb/gis-lis/gi94064.html> - size 14K -

## [Analysis of spatial autocorrelation of U.S.G.S 1:250,000 Digi...](#)

Analysis of spatial autocorrelation of U.S.G.S 1:250,000 Digital Elevation Models Author: Jay Lee  
Elevation Models) Format: html Date: 18/09/01 Time: 13:52:57 Remote Name: 202.28.179.1 Rem  
[http://www.ai-geostats.org/online\\_papers/papers/0000004d.htm](http://www.ai-geostats.org/online_papers/papers/0000004d.htm) - size 1K -

## [Globals](#)

Moran's I and Geary's c are well known tests for spatial autocorrelation. They represent two special  
measures spatial autocorrelation. Moran's I is produced by standardizing the spatial autocovariance  
<http://xerxes.sph.umich.edu:2000/ppa/doc/globals/Globals.htm> - size 6K -

## [Nearest Neighbor Analysis](#)

See Anselin(1995) for a complete discussion of Local Moran's I and LISAs. Input Input data file, w  
each point. The maximum study distance (d). The number of bands within d. The weights matrix file  
<http://xerxes.sph.umich.edu:2000/ppa/doc/Local/Local1.htm> - size 7K -

## CSISS Select Tools

Below is a list of *Spatial Analysis Tools*. CSISS researchers have chosen these tools for their usefulness in aiding the exploration and analysis of spatial phenomena in the social sciences. This list is by no means complete and, it is hoped, will continue to grow with input from the research community. Inclusion on this list is not an endorsement by CSISS. If you have comments, have found an error, or would like to nominate a tool for inclusion please contact the Tools Manager, Luc Anselin at [anselin@uiuc.edu](mailto:anselin@uiuc.edu).

All websites on this page have been comprehensively indexed by the [CSISS Spatial Tools Search Engine](#).

### **Cartographic Data Visualizer (CDV)**

<http://www.kinds.ac.uk/kinds/cdv.htm>

A visual, interactive, graphic front end for analyzing spatial datasets.



### **ClusterSeer**

[http://www.terraseer.com/csr/clusterseer\\_features.html](http://www.terraseer.com/csr/clusterseer_features.html)

ClusterSeer provides statistics for evaluating disease clusters in space and time.

### **CrimeStat**

<http://www.icpsr.umich.edu/NACJD/crimestat.html>

A spatial statistics program for the analysis of crime incident locations.

### **Fragstats**

<http://www.umass.edu/landeco/research/fragstats/fragstats.html>

Computation of wide variety of landscape metrics for categorical map patterns.

## Spatial Tools Links to Portals

Below is a list of *portals*, i.e., collections of links, found useful to researchers of spatial phenomena in the social sciences. All portals listed here have been comprehensively indexed and are searchable at the [CSISS Spatial Tools Search Engine](#).

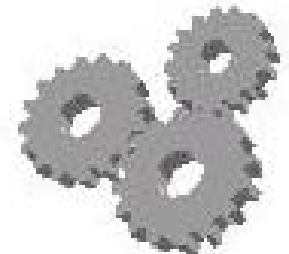
If you have comments, have found an error, or would like to nominate a portal for inclusion please contact the Tools Manager, Luc Anselin at [anselin@uiuc.edu](mailto:anselin@uiuc.edu).

## Spatial Analysis Tools

[AI-Geostats](#). Large collection. The central place for GIS and Spatial Statistics on the web.

[Social Science Statistical Lab](#). Spatial Analysis links for social scientists from Yale University.

[Spatial Analysis Starting Points](#). Additional GIS and Spatial Analysis Links from Georgia.



## Math and Statistics archives with spatial content

[StatLib](#). Perhaps the largest statistical site on the web.



Search for this:

visuali\*ation, population

Submit

## Literature Search of Spatial Analysis in the Social Sciences

**Database of ~ 10,000 entries**  
**Searches abstracts and keywords**  
**Retrieves bibliographic references**

•Derived from *Econ Lit*, *Sociological Abstracts*, *Social Sciences Citation Index*, *Humanities Citation Index*, *MLA International Bibliography*, *Anthropological Literature*, *Historical Abstracts*, *America: History and Life*, and *California Digital Library*



## Literature Search for "agricult\*", "spatial"

Search for this:

1 through 10 of 456 matching documents, best matches first.

Results by: [F HUNDERSTONE](#)

Page: [1](#) [2](#) [3](#) [4](#) [5](#) [6](#) [7](#) [8](#) [9](#) [10](#)

[next>>](#)

- 1: **Agricultural** Restructuring and the **Spatial** Dynamics of United- States Womens Employment in the 1970s

1993 . Padavic, I. *Rural Sociology* v58n(2): 210-232.

[Get Citation](#), [View Record](#), [Find Similar](#)

- 2: **Agricultural** Trade and Mcas - a **Spatial** Equilibrium-Analysis

1981 . Maclaren, D. *Journal of Agricultural Economics* v32n(1): 1-9.

[Get Citation](#), [View Record](#), [Find Similar](#)

- 3: **Spatial** Modeling of **Agricultural** Markets

1993 . LeSage, James P. *American Journal of Agricultural Economics* v75n(5): 1211-16.

[Get Citation](#), [View Record](#), [Find Similar](#)

- 4: Economie spatiale et **agriculture**: Les dynamiques spatiales de l'agriculture contemporaine. (**Spatial** Economics and **Agriculture**: The **Spatial** Dynamics of Contemporary **Agriculture**. With English summary.)

2000 . Capt, Daniele and Bertrand Schmitt. *Revue d'Economie Regionale et Urbaine* v0n(3): 385-406.

[Get Citation](#), [View Record](#), [Find Similar](#)

- 5: Implementing **spatial** economic analysis in **agriculture**: The research frontier

1997 . Morehart, M. J., M. Weiss, G. Whittaker, P. II. Shut, and J. Mackenzie. *American Journal of Agricultural Economics* v70n(5): 1601-1601

# CSISS Summer Workshops 2003

- **Accessibility in Space and Time: A GIS Approach**  
7-11 July, Ohio State University (Mei-Po Kwan)
- **Introduction to Spatial Pattern Analysis in a GIS Environment**, 28 July – 1 August, UCSB (Arthur Getis)
- **Geographically Weighted Regression**, 4-8 August  
(Stewart Fotheringham)
- **Spatial Analysis in Population Studies**  
19-23 May, Pennsylvania State University (Stephen Matthews)

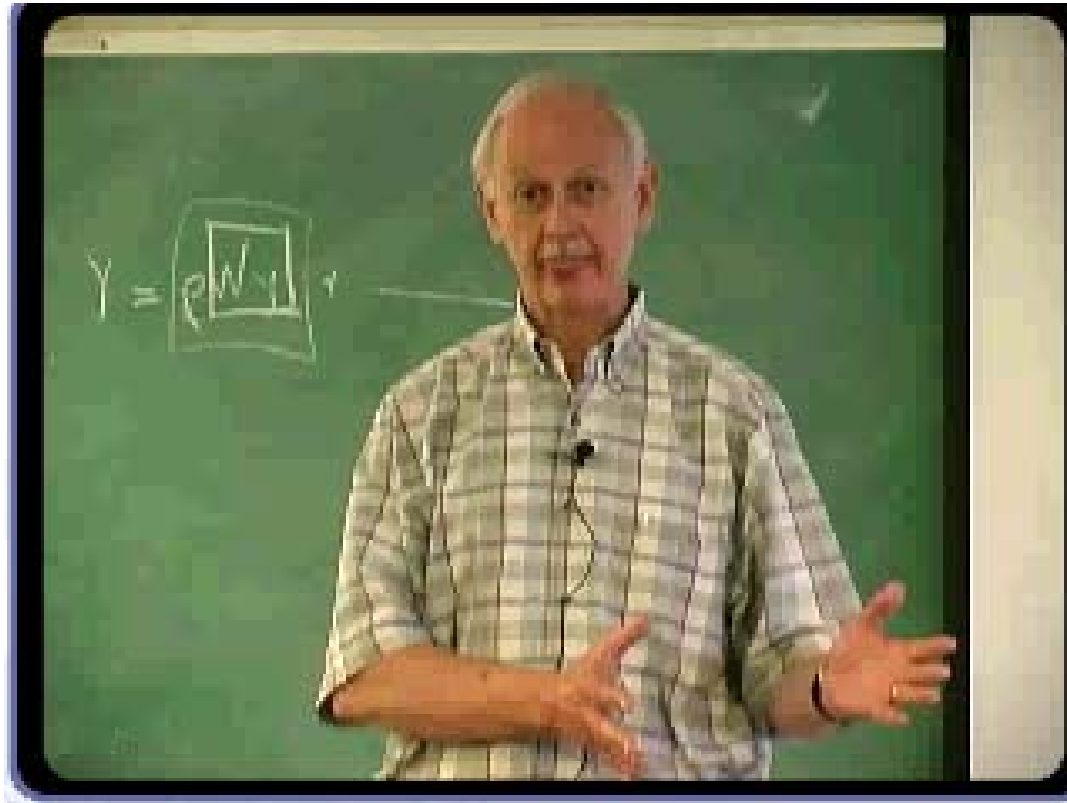
<http://csiss.org/events/workshops/> – to apply and to learn more about the workshops.

**2004 workshops** will be announced in January

# ICPSR Workshops (with Luc Anselin)

- **Introduction to Spatial Data Analysis**  
(University of Michigan) 30 June – 3 July 2003
- **Spatial Regression Analysis** (UIUC)  
14 – 18 July 2003
- <http://icpsr.umich.edu/TRAINING/summer.html>

# Video clips of CSISS summer workshops



**John Weeks**, lecturing on fertility in rural areas of Egypt  
CSISS summer workshop 2002

# CSISS Video Clips of Summer Workshops

[Download Flash player now.](#)

## Introduction to Spatial Pattern Analysis in a GIS Environment

The Nature of Spatial Pattern Analysis Art Getis	Time: 9:58 Quality: <a href="#">High</a> - 31MB
Problems Associated with Spatial Pattern Analysis Art Getis	Time: 9:43 Quality: <a href="#">High</a> - 31MB
An Introduction to GIS Mike Goodchild	Time: 7:29 Quality: <a href="#">Audio Only</a> - 2MB
GIS Functionality Mike Goodchild	Time: 9:58 Quality: <a href="#">High</a> - 33MB
Current Technologies in GIS Mike Goodchild	Time: 14:54 Quality: <a href="#">High</a> - 48MB
Spatial Patterns of Birth Data John R. Weeks	Time: 15:42 Quality: <a href="#">Audio Only</a> - 5MB
Spatial Patterns of Fertility in Egypt John R. Weeks	Time: 10:18 Quality: <a href="#">High</a> - 32MB

# CSISS Best Practice Publications

- *Spatially Integrated Social Science*

MF Goodchild and DG Janelle, eds.

Oxford University Press, 2003

For details, See [www.csiss.org/best-practices/siss](http://www.csiss.org/best-practices/siss)

- *Advances in Spatial Econometric Modeling*

L Anselin, RJGM Florax, and SJ Rey, eds.

Springer-Verlag, 2003

# *SPACE*

## *Spatial Perspectives on Analysis for Curriculum Enhancement*

- Funded under NSF CCLI-National Dissemination Program
- Consortium: UCSB, Ohio State University, UCGIS
- Funding: ~\$1.4 m over 3 years (2004-2006)
- PI: D Janelle / Co-PIs: M Goodchild and R Appelbaum
- Subcontract PIs: M-P Kwan (OSU) / A Getis (UCGIS)
- Focus: Teach the Teachers / Undergraduate Learning

# The *SPACE* Program

- National Education Workshops
- Academic Conference Courses to Enhance Spatial Science (ACCESS)
- On-line Clearing House for Lab Exercises, Data Sets, and Test Items





# American Sociological Association

Atlanta, Georgia 16-19 August 2003

Sunday, 17 August 2003  
Atlanta Hilton Hotel

8:30 - 11:30 a.m.

## *Does Space Matter?*

### *Analyzing and Visualizing Spatial Effects in Sociology*

- **Introduction** Donald G. Janelle
- **Some Great Maps and How We Make Them** John R. Logan and Deirdre Oakley
- **Applying a Spatial Perspective to the Study of Violence: Lessons Learned**  
Rob Baller
- **Exploratory Spatial Data Analysis and GeoDa** Luc Anselin
- **Resources for Spatial Social Science** Don Janelle
- **Open Discussion** John Logan, moderator



# Center for Spatially Integrated Social Science

UCSB / Principal Investigator: M.F. Goodchild

Co-PI: R.P. Appelbaum

Program Director: D.G. Janelle

**Building resources for  
spatial analysis in the  
social sciences**

**[www.CSISS.org](http://www.CSISS.org)**

- Internet Gateway to Spatial Analysis
- Virtual Community for Spatial Social Science
- Learning Resources for Researchers
- Summer National Workshop Program
- Spatial Analytic Tools Development **L. Anselin**