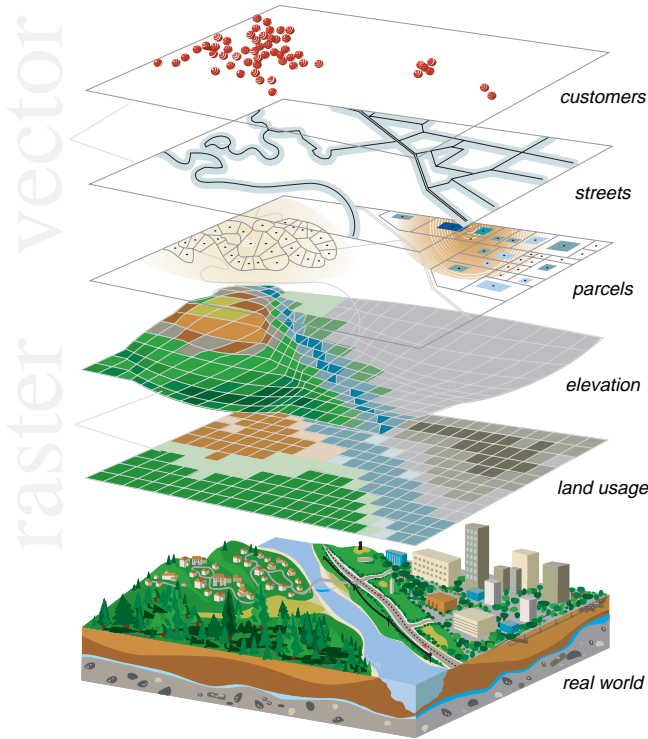


ArcView[®] Spatial Analyst

Advanced GIS Spatial Analysis Using Raster and Vector Data

advanced spatial analysis

ArcView® Spatial Analyst extension enhances the analytic power of ArcView GIS by seamlessly integrating raster-based spatial analysis with ArcView GIS software's vector-based mapping and analysis. This powerful combination brings unprecedented power for seamless analysis, modeling, visualization, and mapping capabilities to your organization in an affordable desktop package.



Sophisticated Raster Data Analysis on the Desktop

ArcView Spatial Analyst provides the tools you need to support a broad range of spatial modeling and application requirements.

- Surface creation (create grid themes from your existing geographic data)
- Surface analysis (create buffers of distance from features, determine the proximity to a feature, derive density surfaces, and perform site suitability analysis)
- Terrain analysis (slope, aspect, hill shade, watershed delineation, visibility analysis, contour generation, and view-shed analysis)
- Overlay vectors on rasters, apply masks, and group raster areas inside vector polygons
- Map algebra (reclassify values, assign weighted values to grids, sum grid values within polygons, and sum grid values in multiple grids)

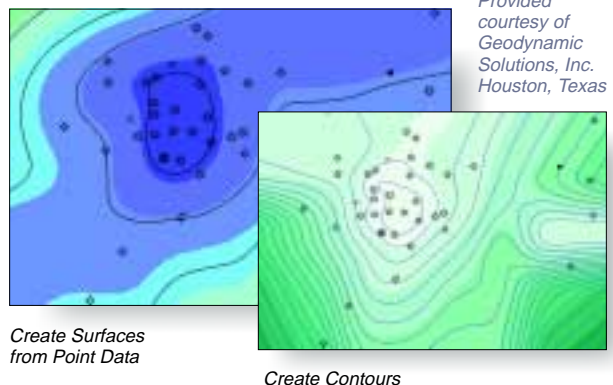
Raster-Vector Integration

ArcView Spatial Analyst lets desktop GIS users create, query, and analyze cell-based raster maps; derive new information from existing data; query information across multiple data layers; and fully integrate cell-based raster data with traditional vector data sources.

Cell-based raster data sets, or grids, are especially well suited to represent traditional geographic phenomena that vary continuously such as elevations, slope, precipitation, and so on. Raster data sets can also be used to represent less traditional types of information such as population density, consumer behavior, and other demographic characteristics. In addition, grids are the ideal data representation for spatial modeling applications such as hydrologic modeling or evaluating the dynamics of population change over time.

With ArcView Spatial Analyst, you can leverage both types of data to achieve optimal results. For example, site suitability analysis often requires combining data about slope (information best represented as grids) and the location of roads and property boundaries (information best represented as vectors) in order to determine suitable locations for a new facility.

Terrain Analysis



ArcView Spatial Analyst supports a diverse range of applications. Some examples include

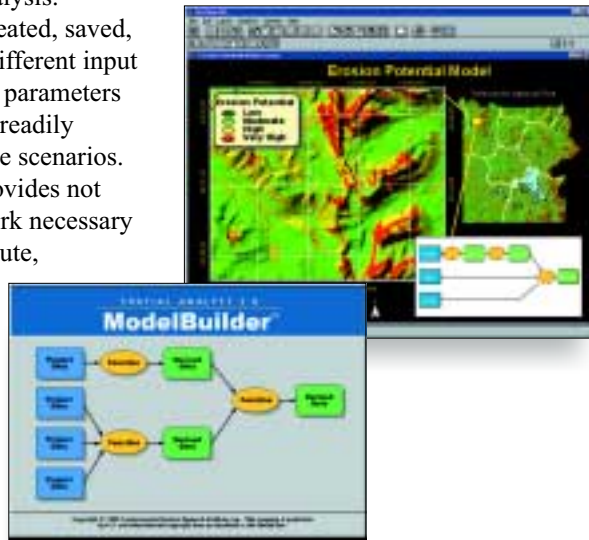
Capability Modeling	Predictive Modeling
Sensitivity Modeling	Hydrologic Modeling/Analysis
Site Suitability Analysis	Trade Area Mapping
Site Location Analysis	Land Use Analysis
Crop Yield Analysis	Demographic Analysis

seeing the big picture

Spatial Modeling with ModelBuilder

ArcView Spatial Analyst includes easy-to-use tools for building and executing various types of spatial models. ArcView Spatial Analyst users can use the ModelBuilder™ process wizards and diagramming tools to interactively construct flow diagrams that visually represent processes of geographic analysis.

Models can be created, saved, and rerun using different input data and function parameters enabling users to readily explore alternative scenarios. ModelBuilder provides not only the framework necessary to construct, execute, and modify spatial models but also an excellent means to document and present models to others.



Modeling Tools and Features

- Create and manage automated and self-documenting spatial models using ModelBuilder.
- Convert feature themes (point, line, or polygon) to grid themes.
- Create faster buffers based on distance or proximity from feature or grid themes.
- Generate density maps from themes containing point features.
- Create continuous surfaces from scattered point features.
- Produce contour, slope, and aspect maps and hill shades of these surfaces.
- Perform cell-based map analysis.
- Simultaneously execute Boolean queries and algebraic calculations on multiple grid themes.
- Perform neighborhood and zone analysis.
- Perform grid classification and display and much more.

Data Sources

ArcView Spatial Analyst can create raster data from any point, line, or polygon feature source such as ArcInfo™ coverages, shapefiles, computer-aided design files, vector product format files, and ArcView GIS themes created from tabular data. In addition, data in standard formats can be imported including TIFF, JPEG, BMP, SunRaster™, USGS DEM, DTM, NIMA DTED, generic ASCII, MrSID™, and others.

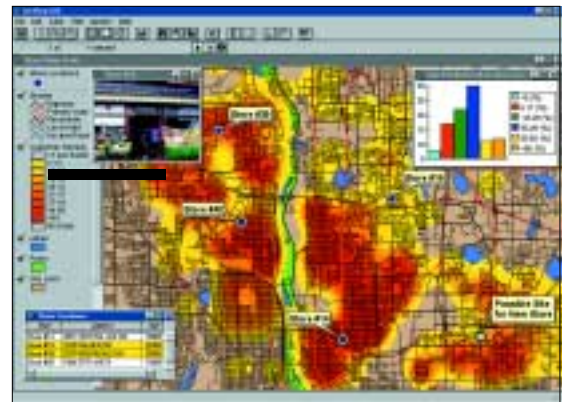
Developer Tools

ArcView Spatial Analyst includes a rich suite of additional raster analysis tools that can be accessed through Avenue™ software, ArcView GIS software's built-in object-oriented scripting language. ArcView Spatial Analyst, customized with Avenue, lets you build new applications that deliver highly sophisticated spatial modeling solutions.

Supported Platforms

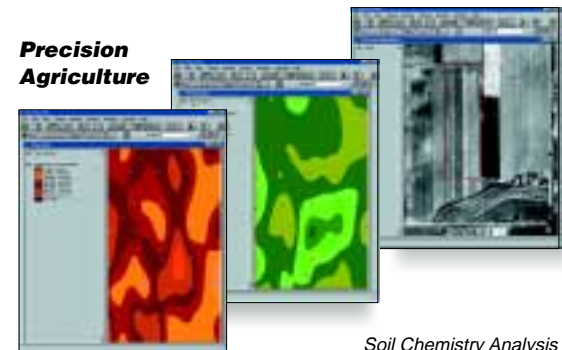
ArcView Spatial Analyst is available for Windows® (95/98, NT, and 2000) and select UNIX® platforms. ArcView Spatial Analyst requires ArcView GIS 3.x software. ArcView Spatial Analyst 2 including ModelBuilder requires ArcView GIS 3.2 and is available for Windows (95/98/NT/2000) platforms.

Site Location Analysis



Demographic Density Mapping

Precision Agriculture



Soil Chemistry Analysis



For more than 30 years ESRI has been helping people manage and analyze geographic information. ESRI offers a framework for implementing GIS in any organization with a seamless link from personal GIS on the desktop to enterprisewide GIS client/server and data management systems. ESRI GIS solutions are flexible and can be customized to meet the needs of our users. ESRI is a full-service GIS company, ready to help you begin, grow, and build success with GIS.

Corporate

ESRI
380 New York Street
Redlands, California
92373-8100, USA
Telephone: 909-793-2853
Fax: 909-793-5953

For more information
call ESRI or your
local reseller at

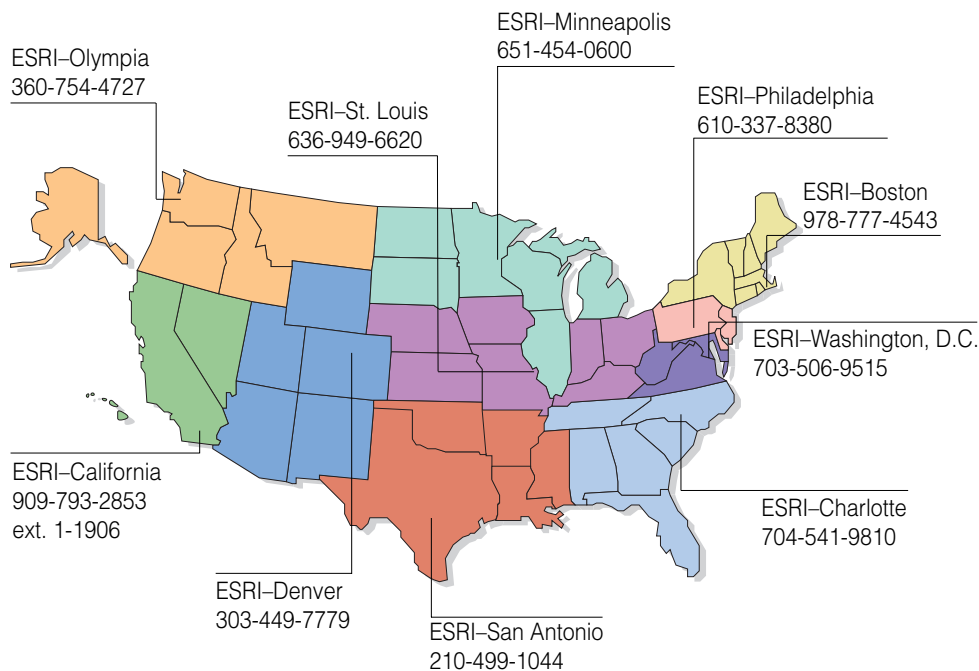
1-800-447-9778
(1-800-GIS-XPRT)

Send e-mail inquiries to
info@esri.com

Visit ESRI's Web page at
www.esri.com

Outside the United States,
contact your local ESRI distributor.
For the number of your distributor,
call ESRI at 909-793-2853,
ext. 1-1235,
or visit our Web site at
www.esri.com/international

Regional Offices



International Offices

Australia 61-89-242-1005	Hong Kong 852-2730-6883	Netherlands 31-10-217-0700	Sweden 46-23-84090
Belgium/Luxembourg 32-2-460-7480	Hungary 361-428-8040	Poland 48-22-825-9836	Thailand 66-2-678-0707
Canada 416-441-6035	India 91-11-620-3802	Romania 40-1-231-13-81	United Kingdom 44-1296-745-500
France 33-1-46-23-6060	Italy 3906-406-96-1	Singapore/Malaysia/Indonesia 65-742-8622	Venezuela 58-2-285-1134
Germany and Switzerland 49-8166-677-0 41-1-360-2460	Korea 82-2-571-3161	Spain 34-91-559-4375	

Copyright © 2000 Environmental Systems Research Institute, Inc. All rights reserved. ESRI, ArcView, and the ESRI globe logo are trademarks of Environmental Systems Research Institute, Inc., registered in the United States and certain other countries; registration is pending in the European Community. ArcInfo, ModelBuilder, Avenue, 3D Analyst, StreetMap, ArcPress, the ArcView GIS logo, and the ArcView Spatial Analyst logo are trademarks and www.esri.com and @esri.com are service marks of Environmental Systems Research Institute, Inc. Other companies and products mentioned herein are trademarks or registered trademarks of their respective trademark owners. ArcView GIS uses Neuron Data's Open Interface.



Place ESRI business partner or distributor address here.