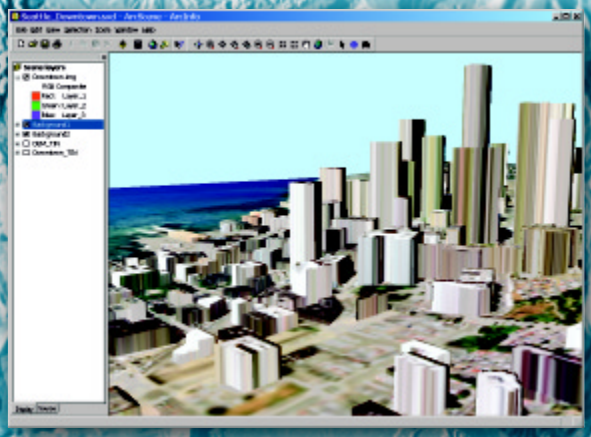
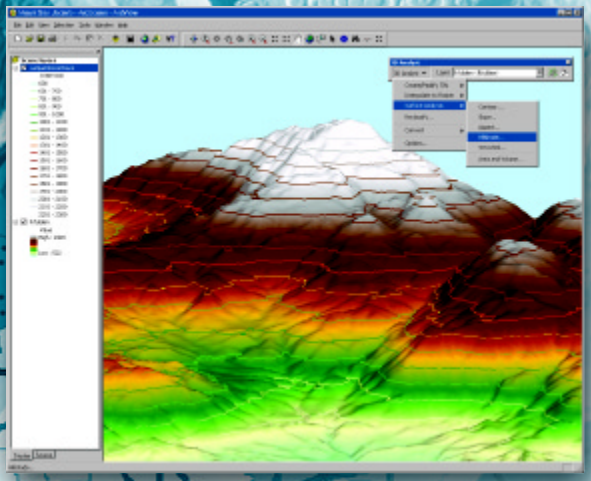




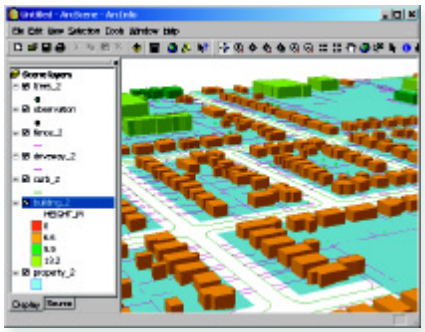
ArcGIS™ 3D Analyst™

Three-Dimensional Visualization, Topographic Analysis, and Surface Creation

ESRI ArcGIS™

ArcGIS 3D Analyst

Three-Dimensional Visualization, Topographic Analysis, and Surface Creation



ESRI® ArcGIS® 3D Analyst™ software is the next evolution in geographic information system (GIS) technology. ArcGIS 3D Analyst lets you interact with your data in the most natural way possible. You already use maps to examine the spatial relationships in your data; now see the effect that mountains, valleys, building profiles, and other three-dimensional objects have on these relationships. With ArcGIS 3D Analyst you can create dynamic and interactive maps that will elevate your geographic visualization and analysis to a heightened plateau of visual reality.

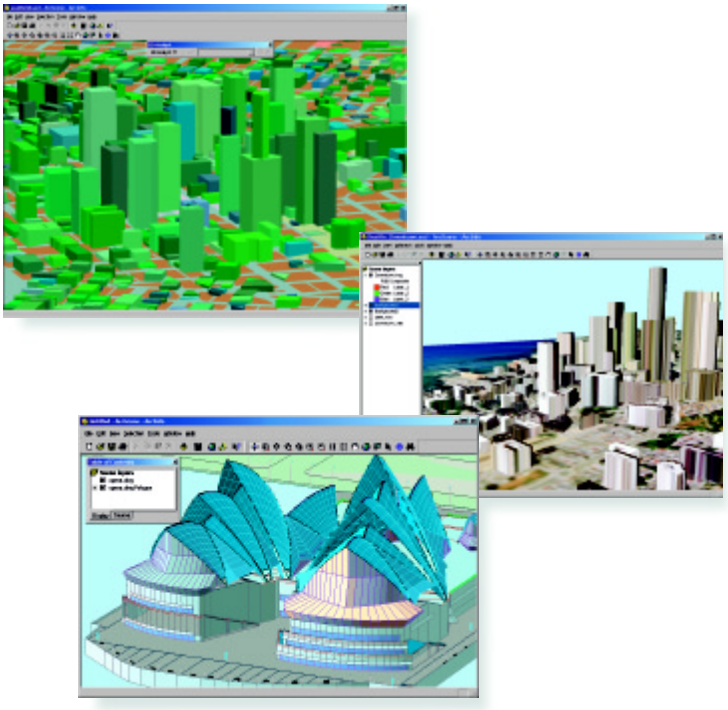
Whether you are planning a world-class downhill ski run, evaluating subsurface hazardous materials dispersion, or performing dramatic fly-through simulations, ArcGIS 3D Analyst is the solution for interactive perspective viewing and advanced three-dimensional modeling and analysis.

ArcScene

ArcGIS 3D Analyst adds a specialized three-dimensional viewing application, ArcScene™, to your desktop. ArcScene lets you make perspective view scenes in which you can navigate and interact with your GIS data. You can drape raster and vector data over surfaces and extrude features from vector data sources to create lines, walls, and solids. You can also use ArcGIS 3D Analyst tools in ArcScene to create and analyze surfaces.

ArcGIS 3D Analyst lets you...

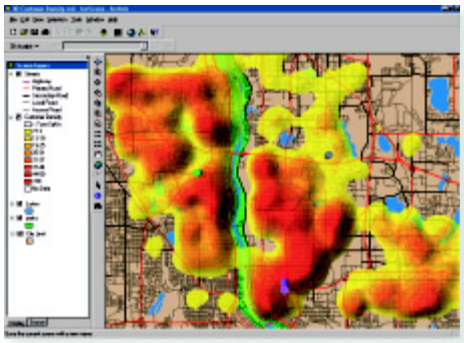
- Perform interactive perspective viewing, including pan and zoom, rotate, tilt, and fly-through simulations, for presentation, analysis, or export for display on the Web.
- Model real-world surface features such as buildings.
- Model subsurface features—wells, mines, groundwater, and underground storage facilities.
- Generate three-dimensional surfaces on the fly from attributes.
- Apply data normalization and exaggeration on the fly.
- Drape two-dimensional data on surfaces and view in three dimensions.
- Calculate surface area, volume, slope, aspect, and hillshade.
- Generate contours as two-dimensional or three-dimensional shapes.
- Perform viewshed and line-of-sight analysis, spot height interpolation, profiling, and steepest path determination.
- Use any data supported in ArcGIS including CAD, shapefiles, ArcInfo™ coverages, and images.
- Query three-dimensional data based on attribute or location.
- Export data for display on the Web using VRML.

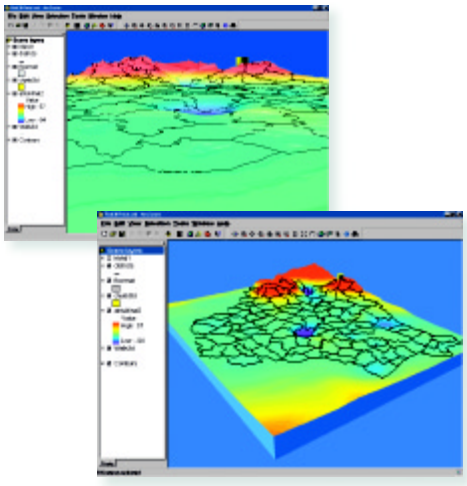


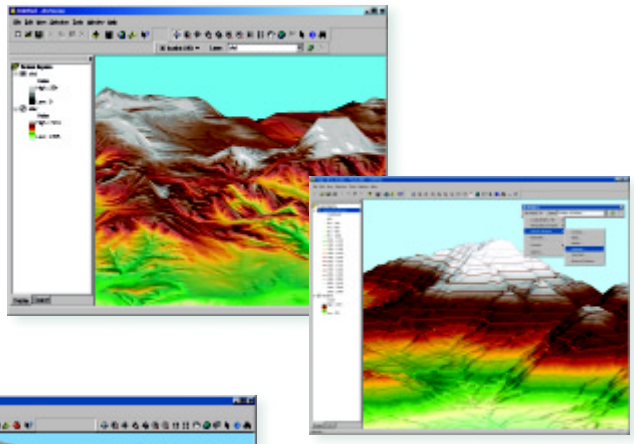
Visualization and Analysis

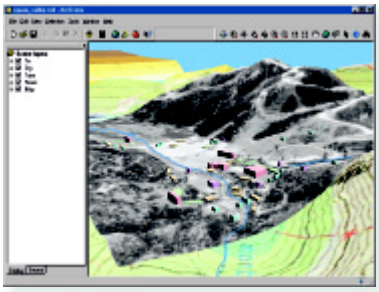
ArcGIS 3D Analyst provides a rich suite of methods for interactive perspective viewing including pan and zoom, rotate, tilt, and fly-through simulations. The high-quality, realistic three-dimensional scenes you create using ArcGIS 3D Analyst are easily turned into stunning animation sequences that make the presentation of your analysis even more compelling.

Also included are advanced tools for three-dimensional modeling and analysis applications. With ArcGIS 3D Analyst you can perform viewshed and line-of-sight analysis coupled with spot height interpolation and profiling. You can also engage in steepest path determination and contouring as well as calculate surface area and volumetrics, slope, aspect, and hillshade.









New to Three-Dimensional Data?

ArcGIS 3D Analyst supports three primary data types for modeling features in three dimensions—grids, triangulated irregular networks (TINs), and three-dimensional shapefiles.

Create grid surfaces by importing data from widely available data sources including U.S. Geological Survey digital elevation models (DEMs) and National Imagery and Mapping Agency (NIMA) Digital Terrain Elevation Data (DTED). TINs are fast, efficient, vector-based representations of surfaces that can be derived from any existing ArcGIS data. The TIN surface model supports the most demanding applications by precisely honoring your source data and accurately representing critical surface features through the use of breaklines. Attribute information may be assigned to both the nodes and facets of a TIN to facilitate advanced surface modeling and analysis. ArcGIS 3D Analyst includes tools for editing the Z value of individual nodes, and nodes can be moved or deleted as necessary.

And converting your data is not required! Any two-dimensional ArcGIS data, including CAD, shapefiles, and ArcInfo coverages, can be draped onto a three-dimensional surface (TIN or grid) on the fly! ArcGIS 3D Analyst can also drape a variety of image data sources (satellite images, aerial photographs, scanned images) onto surface features, adding visual texture and content to your three-dimensional mapping applications.

Supported Platforms

ArcGIS 3D Analyst is available for Windows® 2000 and Windows NT®. ArcGIS 3D Analyst requires ArcInfo 8.1, ArcEditor™ 8.1, or ArcView® 8.1.

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 your local reseller or ESRI at

1-800-447-9778

(1-800-GIS-XPRT)

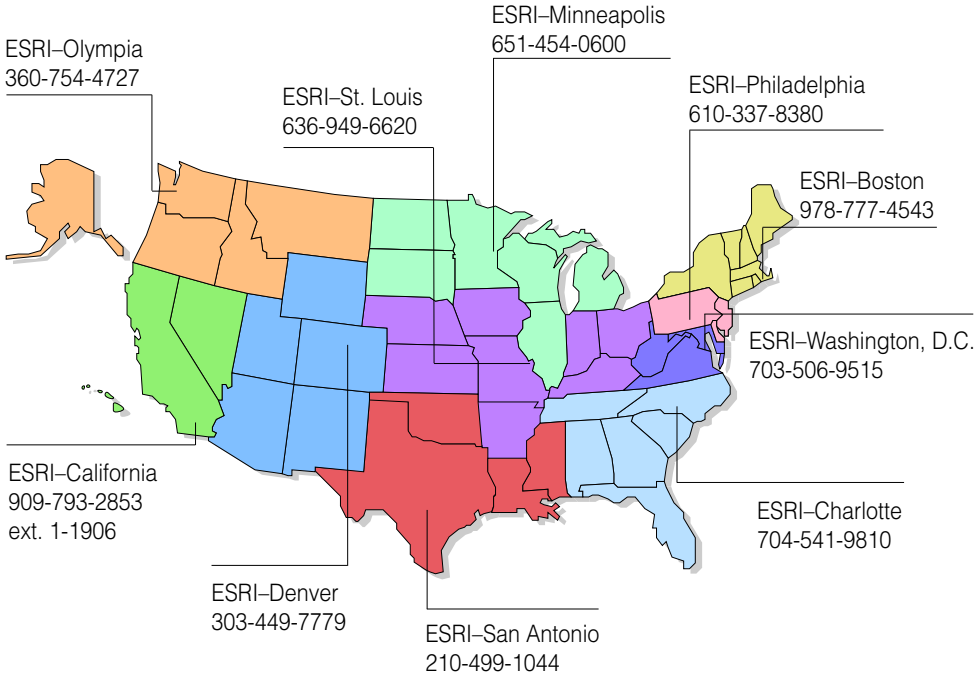
Send e-mail inquiries to

info@esri.com

Visit ESRI's Web page at

www.esri.com

Regional Offices



International Offices

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

Australia
61-39-882-6222

Belgium/Luxembourg
32-2-460-7480

Bulgaria
359-2-560-871

Canada
416-441-6035

France
33-1-46-23-6060

Germany and Switzerland
49-8166-677-0
41-1-360-2460

Hong Kong
852-2730-6883

Hungary
361-428-8040

India
91-11-620-3802

Indonesia/Malaysia
62-21-570-7685
603-7874-9930

Italy
39-06-406-96-1

Korea
82-2-571-3161

Netherlands
31-10-217-0700

Poland
48-22-825-9836

Portugal
351-2-1-781-6640

Romania
40-1-231-13-81

Singapore
65-742-8622

Spain
34-91-559-4375

Sweden
46-23-755-400

Thailand
66-2-678-0707

United Kingdom
44-1296-745-500

Venezuela
58-212-285-1134

Place ESRI business partner or distributor address here.

GSA Federal Supply Schedule
No. GS-35F-5086H

87855
CWP20M6/01wb

Printed in USA