





# ArcView<sup>®</sup> GIS The Geographic Information System for Everyone<sup>™</sup>

aking care of business means leveraging technology that helps you see the big picture, make the best decisions, and capitalize on your organization's investment in data and resources. ArcView® GIS software by ESRI offers an innovative solution that will help you create, visualize, analyze, and present information better and more effectively.



# The Power of Place

Hidden in most data is a geographical component that can be tied to place: an address, postal code, global positioning system location, census block, city, region, or country. Geographic information system (GIS) software lets you see, explore, and analyze data by location, revealing hidden patterns, relationships, and trends that are not readily apparent in spreadsheets or statistical packages.

# Geography Is the Key

GIS is the technology that brings it all together. Working with locational information, a GIS has the power to solve problems you encounter every day. With a GIS you can track customer sales, analyze crime patterns, route delivery trucks, display soil types, find the best location for an expanding business, and much more.

# The Premier GIS Solution

ArcView GIS software is the premier solution for desktop GIS analysis and map presentation. ArcView GIS is the most popular desktop GIS and mapping software, with more than 500,000 copies in use worldwide. With ArcView GIS you can create intelligent, dynamic maps using data from virtually any source and across most popular computing platforms. ArcView GIS includes tools and data you can use immediately to perform state-of-the-art analysis on key issues. It lets you work with maps, database tables, and business charts all in a single application.

# Who Uses ArcView GIS?

City and county governments use ArcView GIS to manage local zoning, land use and property tax assessments,

and other municipal services. Bankers map mortgage loans. Law enforcement officials track and analyze crime incidents with ArcView GIS. Real estate developers locate new commercial development sites. Marketing professionals analyze demographic data to target advertising expenditures. Utility companies use GIS to manage facilities and service customers. In each case, analyzing data with ArcView GIS helps everyone make better, more informed decisions that improve services, reduce costs, or reach more customers.







#### ArcView GIS at Work

- Advertising
- Aerospace
- Agriculture
- Architecture
- Automated Mapping
- Banking
- Business
- Cadastral/Tax Mapping
- Community Development
- Construction
- Crime Analysis
- Demographics
- Education
- Emergency Services
- Energy
- Engineering
- Environmental Management
- Epidemiology
- Facility Management
- Financial Services
- Fleet Management
- Health
- Human Services
- Insurance
- Intelligence
- Land Management
- Landscape Architecture Local Government
- Logistics
- Manufacturing
- Marketing
- Military/Defense
- Natural Resources
- Oil and Gas
- Pipeline
- Planning
- Property Management
- Public Health
- Public Information
- Public Safety

- Real Estate
- Redistricting
- Retail Siting
- Route Planning

- Telecommunications
- Tourism
- Transportation
- Travel
- Trucking
- Universities



- - - Public Transit
    - Publishina

    - Sales Force Automation
    - Social Services
    - Tax Assessment

    - Utilities
    - Water/Wastewater

## A New Era

GIS has emerged as an integral component in nearly every type of business and government service. Once regarded as primarily "back-office" software, ArcView GIS moves the power of GIS to the desktop, throughout the enterprise, and out to your customers and constituents via Intranet and Internet applications.



## **GIS for Everyone**

ArcView GIS software is easy to learn and easy to use. Powerful, flexible, and intuitive, ArcView GIS is unique in that it is easy to get started quickly yet can grow as your needs and requirements change. ESRI offers a suite of optional extensions for ArcView GIS that dramatically extend the software's functional capabilities. Extensions are plug-ins to ArcView GIS that can be loaded and unloaded as needed for specialized GIS analysis.



ArcView GIS Family of Software Programs

#### **Key Features**

- Easy-to-use interface.
- Integrated charts, maps, tables, graphics, and multimedia.
- Powerful visual mapping.
- Cartographic wizards facilitate high-quality map composition.
- Easy-to-use labeling and text tools.Thousands of industry/
- application-specific symbols.Geographic hot links to all
- supported data formats. • Exceptional analysis capabilities.
- Analysis wizards for geoprocessing operations such as buffer, dissolve, merge, clip, intersect, and union.
- High-end address matching and geocoding.
- Projection utility for shapefile projection and datum transformation.
- Geographic and tabular data editing.
- Integrate images and computeraided design (CAD) data.
- Comprehensive database access.
- Seamless client/server access to data warehouses.
- More than five CDs of data included.Enhanced report writing using
- Enhanced report writing using Crystal Decisions<sup>®</sup> Crystal Reports<sup>™</sup>.
   Self-paced quick-start tutorial gets
- you up and running in 10 minutes.
- Full-color user manual guides you through key tasks.
- Comprehensive online help.
- Completely customizable.
  Comprehensive developer environment.
- Expanded analysis capabilities using optional extensions.

#### Platforms

ArcView GIS software runs on

- Microsoft<sup>®</sup> Windows<sup>®</sup>
- 95/98
- NT 4.0
- 2000
- XP
- UNIX®
- Compaq<sup>®</sup> Tru64<sup>™</sup> UNIX
- HP<sup>®</sup> 9000/700 and 8x7
   IBM<sup>®</sup> RS/6000<sup>™</sup>
- SGI
- Sun<sup>™</sup> Solaris<sup>™</sup> 2.x

# Visualization

The Value of Seeing Geographically

Working geographically reveals relationships among the forces that drive your organization. It helps you see patterns you could not see before, gain new insights, and make significantly better decisions.

# How ArcView GIS Can Help

ArcView GIS makes it easy to create maps using your own data. With ArcView GIS software you can access records from many types of existing databases and see them on a map.

# Seeing the Big Picture

Spreadsheets list numbers in columns and summarize data in charts. With ArcView GIS software you can visualize categories of information on a map. If you are looking at consumer buying habits in your region, for example, in an instant you can see clusters or groups based on criteria that matter to you. Each category is represented by its own color. You can even add to or change the criteria to see how the big picture changes. This is the power of geographybased analysis.

# Moving Up to the Next Level

If your organization is like most, you have already made a significant investment in collecting and organizing information. GIS helps you leverage this investment. ArcView GIS provides a solid, reliable system for integrating data, performing expert analysis on key issues, and visualizing your results on presentation-quality maps and data displays. You can even link multimedia or Internet data to your map, providing the next level of visual context for your data. Not only will your results be better understood, but they can also be easily integrated into many different types of analyses, empowering better decision making throughout your organization.



Charts



Maps





Spreadsheets/Databases



Pictures/Videos



Images



"Using ArcView GIS, we profile and visualize the trade areas of our branches based on point data about customers who conduct their banking transactions at each branch. This enables us to determine the degree of overlap between neighboring branches, which we've



ArcView GIS

used in the planning of more than 100 branch consolidations following our merger. We also develop maps that pinpoint the census tracts, offering the most opportunity (as defined by something we call financial buying power) for each of our branches."

> Craig Zarider Vice President Chase Manhattan Bank

# **Quality Mapping**

Produce Professional-Quality Maps and Data Displays

rcView GIS software's advanced cartographic tools provide a complete system for creating publicationquality maps. You can create richly detailed and attractive maps that effectively communicate the results of your analysis.

# **Develop Sophisticated Maps** With Easy-to-Use Wizards

ArcView GIS software provides a rich set of intuitive map composition tools and wizards that lets you quickly create outstanding presentation-quality maps. The wide variety of map presentation capabilities ranges from extensive color and pattern palettes, symbols, and fonts to templates you can use again and again.

ArcView GIS mapping tools enhance communication with built-in map composition features such as on-screen map elements and prebuilt color ramps. Use ArcView GIS software's automatic data-driven classifications, color ramp shading of data, graduated symbols, chart symbols, and business graphics to create professional-quality maps.

### **Quality Mapping Key Features**

• Predesigned map templates.

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Access Road

015-02

02-0.24 0.24 - 0.28

0.28 - 0.37

0.37 - 0.67

Block Groups 0-0.07 0.07 - 0.15

Study Area: Tampa and St. Petersburg Area

Book Stores

Time from Stores

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2

4 8

Highway

Primary road

Connecting roads

 Thousands of fonts and industryfocused graphic symbols.



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# **Create Compelling Results**

Save time and create a consistent style in your maps using one of ArcView GIS software's predesigned map templates. These templates are easily customized by adding corporate logos, title blocks, or other special map elements.

From simple maps to complex map presentations, ArcView GIS includes the tools you need to produce compelling, presentationquality map graphics.



"ArcView GIS paved the way for our company to offer Tobin Super Base". The existence of ArcView GIS allows our petroleum land management customers to tap the full power and true complexity of the data for the first time, both on the desktop and in the field. When our sales staff demonstrates the data with ArcView GIS, it almost sells the product for us, and if the customer does not already have ArcView GIS, they want it! It is truly a symbiotic relationship."

> Pauline Jacobson Vice President Tobin International, Ltd.



# Data Integration

ArcView GIS Uses All Types of Geographic Data

t is estimated that 80 percent of all data contain a geographic component such as country, state, ZIP Code, or street address. By using ArcView GIS and the power of geography, you can integrate this data for analysis and better decision making.

ArcView GIS makes it simple to display your data on a map. You can integrate a wide variety of data including business data, customer demographics, facilities data, CAD data, imagery, and multimedia. Built-in SQL connectivity gives you client/ server database access that enables

you to add data residing almost anywhere in your organization to your maps for display and analysis. You can map tabular data residing in Microsoft Access, dBASE<sup>®</sup>, FoxPro<sup>®</sup>, ASCII, INFO<sup>™</sup>, SQL<sup>™</sup>, Open Database Connectivity (ODBC), and/or SAP<sup>™</sup> R/3<sup>®</sup> databases.



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#### **Data Integration**

ArcView GIS and optional extension-supported data formats include the following:

#### **Read data from**

ESRI<sup>®</sup> shapefiles, ArcInfo<sup>™</sup> coverages, ArcInfo dynamic segmentation coverages, route systems, PC ARC/INFO<sup>®</sup> coverages, AutoCAD<sup>®</sup> (DXF<sup>™</sup> and DWG), MicroStation<sup>®</sup> (DGN and MSG), TIFF 6.0 (including GeoTIFF), VPF, ADRG, CADRG, CIB, NITF, MrSID<sup>™</sup> (.sid), JPEG (JFIF), ERDAS IMAGINE<sup>®</sup>, ERDAS<sup>®</sup> LAN and GIS, BSQ, BIL, BIP, SunRaster<sup>™</sup> files, BMP, GRID (as image data), and DIGEST (ASRP 1.1 and 1.2 and USRP 1.2 and 1.3).

#### Access spatial data in a relational

#### database management system

(DBMS) ArcSDE® with Spatial Database Engine<sup>m</sup> (SDE<sup>®</sup>), or Oracle<sup>®</sup> Spatial Data Option (SDO) with SDE.

#### Write/Export data to

ESRI shapefiles, DXF, placeable WMF, Windows metafile, Windows bit map, PostScript<sup> $\circ$ </sup>, CGM (binary, character, clear text), and JPEG.

#### Import data from

ArcInfo (.eøø), MapInfo<sup>®</sup> (MIF), S-57, SDTS (raster, point), and ASCII.

#### Extended data support from optional

#### ArcView GIS extensions

TIN, GRID (as raster data), DOQ, IRS-1C, Landsat TM, RPF, SPOT, and GeoSPOT.

#### Use database tables directly from

dBASE, INFO, SDE, and ASCII files.

#### Access other databases through ODBC including

Microsoft Access, Paradox, FoxPro, Oracle, Sybase, Informix, DB2, INGRES, or any ODBC/SQL-compliant database.

#### Extract data from

SAP R/3.



# **Create Your Own Geography**

ArcView GIS provides a rich environment for data capture (digitizing) and editing. These tools let you add new features to a map or modify existing features to accurately represent change or reflect new information.

# **Advanced Address** Matching and Geocoding

ArcView GIS has a powerful geocoding feature that automatically plots street



addresses and other address data on a map and helps you manage incorrect or misspelled addresses. It can match to any level of geography from country, state, or county, down to city, ZIP Code, and street address.

#### Editing Tools



Snap

Merge

Split

Intersect



ArcView GIS is the system that brings it all together.

#### Editing

- Edit geographic features and tabular attributes.
- Use either a mouse or digitizer to enter/ edit data.\*
- Perform stream mode digitizing.
- Perform complex vertex editing (add, move, delete, snap).
- Use powerful shape operations
- (split, union, combine, intersect). • Automatically update attributes
- when editing. • Calculate new values for your databases
- based on other information.
- \* Digitizer support is available for Microsoft Windows.



# **Spatial Analysis**

Enabling Better Decision Making

S patial analysis—the process of modeling, visualizing, and interpreting results—is the real power of a GIS. ArcView GIS contains hundreds of ways to query and analyze your data. You can run the easy-touse geoprocessing wizards or define your own analysis procedures and yield powerful results.

You can find answers according to location, content, proximity, and intersection. As you add data to maps, find the geographic factors that drive trends and distributions. Add different data layers, and then find locations where particular characteristics coincide. Identify the places where most of your current business occurs, then find places similar to these to expand. Aggregate data geographically by summarizing it based on areas such as census tracts, states, or sales territories.

You will literally start to see things in a new light. Furthermore, the output from one analysis can be used as the input for the next analysis, enabling you to refine your analysis for better results.



"GIS technology enables us to create an intuitive and effective environment to explore various market information. The GIS-enhanced data visualization and data mining capabilities help to speed up the underwriting and due diligence process. Also, the technology gives us a competitive edge to improve our portfolio performance and advance our products and services to clients."

> Fred Lieblich Director of Research MetLife Realty Group, Inc.



For more information about ArcView GIS software's analysis tools, visit the ESRI Web site at www.esri.com/arcviewgis

# ...and More

# **Geoprocessing Wizards**

The geoprocessing wizards enable you to perform sophisticated spatial analysis on the desktop. Analytic capabilities include buffer, dissolve, merge, clip, intersect, union, and join. The wizards guide you through the functions with step-by-step instructions. The instructions ensure easy and accurate execution of the analysis, ensuring easy-to-perform spatial analyses.





# **Report Writer**

Report Writer\* integrates the industry-leading Crystal Reports report generation and editing application into ArcView GIS. The process of data selection and preparation for the reporting process is streamlined using Report Writer. You can create powerful and attractive reports by using predefined templates or customized templates designed to suit your needs. Report templates can include any combination of maps, tables, and charts.

\*Available for Microsoft Windows.

# **Projection Utility**

The ArcView GIS projection utility\* is a wizard-based tool that lets you project shapefiles from geographic coordinates to projected coordinates, project shapefiles from one projection to another, and perform datum transformations on shapefiles.



# **ArcView GIS Extensions**

Specialized GIS Analysis

A rcView GIS features an extensible software architecture that delivers a scalable platform for GIS computing. This architecture works as a series of "plug-in" modules that can be mixed and matched to dramatically extend the functional capabilities of ArcView GIS.

The extension architecture for ArcView GIS provides an exceptionally flexible environment. The appropriate extension functionality can be selected from a variety of internal, external, and even user-defined options, tailoring application solutions to best meet your needs. These extensions can be loaded as necessary. When an extension is loaded, the features of the extension automatically display on the ArcView GIS user interface.

# ArcView Spatial Analyst—Advanced GIS

# Spatial Analysis Using Raster and Vector Data

ArcView Spatial Analyst provides a broad range of powerful spatial modeling and analysis features. You can create, query, map, and analyze cell-based raster data and perform integrated raster–vector analysis.

ESRI's ModelBuilder<sup>™</sup>\* technology is included with ArcView Spatial Analyst and incorporates logical modeling with GIS. It provides beginning and advanced users with a set of easy-to-use tools for quickly building and interacting with spatial models.

\* Available for Microsoft Windows.

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Arc	LVIEW GIS Extensions
Included	Projection Utility
Extensions	Report Writer
	CAD Reader
and the second second	Database Access
	Dialog Designer
	Digitizer
	Geoprocessing
	Graticules and Measured Grids
	Image Readers
	Legend Tool
	Military Data Readers
	VPF Viewer
1000	DXF Export
	SDTS Data Import
10.000	DIGEST (ASRP/USRP)
	MGRS Coordinate Display
	S-57 Data Converter
	RPF Indexer
Optional	
Extensions ()	ArcView Spatial Analyst
Ċ	ArcView 3D Analyst
	ArcView Image Analysis
0	ArcView Tracking Analyst
	ArcView Business Analyst
	ArcView Network Analyst
0	ArcView StreetMap
0	<ul> <li>ArcView StreetMap 2000</li> <li>ArcPress for ArcView</li> </ul>
•	□ ArcPress for ArcView
Business Partner Extensions	Hundreds Available
Create Your Own Extensions	Build Your Own Solutions



## **ArcView Spatial Analyst Features**

- 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.
- Derive contour, slope, and aspect maps and hillshades of these surfaces.
- Perform cell-based map analysis.
- Construct and interact with spatial models created with ModelBuilder.

- Simultaneously execute Boolean queries and algebraic calculations on multiple grid themes.
- Perform neighborhood and zone analysis.
- Do discrete cell-by-cell analysis.
- Perform grid classification and display.
- Import data from standard formats: TIFF, BIL, SunRaster, USGS DEM, SDTS, and DTED.
- Access a set of even more advanced raster analysis tools through Avenue™ requests.

# ArcView 3D Analyst—Three-Dimensional Surface Creation,

# Visualization, and Analysis

ArcView 3D Analyst<sup>™</sup> software provides advanced tools for three-dimensional modeling and analysis. You can create, analyze, and display surface data and other three-dimensional data.



# ArcView Image Analysis—Advanced Image Integration,

## Display, and Analysis

ArcView Image Analysis enhances the geographic imaging capabilities of ArcView GIS. This extension supports a wide range of capabilities including data visualization, data extraction/creation, and analysis. ArcView Image Analysis leverages a broad range of readily available image data types—including popular satellite imagery, aerial photography, orthoimagery, and other remotely sensed data—supplementing a wide variety of GIS applications.

Enhanced Image Visualization



Image provided by SPOT Satellite Imagery: Copyright CNES 1998





Image provided by Space Imaging ESOSAT, Thornton, Colorado

#### Image Mosaic



Image provided by SPOT Satellite Imagery: Copyright CNES 1998

## **ArcView 3D Analyst Features**

- Build three-dimensional surface models from any point data.
- Perform interactive perspective viewing, including pan and zoom, rotate, tilt, and fly-through simulations, for presentation, analysis, or display on the Web.
- Model real-world surface features such as buildings.
- Model subsurface features—wells, mines, groundwater, and underground storage facilities.
- Drape two-dimensional features or image data on three-dimensional surfaces.
- Calculate surface area and volume, slope, aspect, and hillshade.
- Generate three-dimensional contours.
- Perform viewshed and line-of-sight analysis, spot height interpolation, profiling, steepest path determination, and contouring.
- Work with most common data formats including CAD.
- Query attribute data in 3D.
- Export data for display on the Web.

## **ArcView Image Analysis Features**

- Use current image data sources for visual reference and to update existing maps.
- Image mosaic.
- Quickly display and manipulate image data.
- Georeference imagery to shapefiles, coverages, global positioning system points, or reference images.
- Automatically map feature boundaries.
- Perform change detections for continuous and thematic imagery.
- Perform multispectral categorizations for land cover mapping and data extraction.
- Perform image enhancement.
- Use various data types, including aerial photography and digital orthoimagery of all types, as well as current and future small-, medium-, and large-scale satellite data.
- Read and import standard data formats.

# ArcView Tracking Analyst—The Solution for

Monitoring Time, Motion, and Change

ArcView Tracking Analyst enables you to explore, visualize, and analyze information relative to time, motion, and change. ArcView Tracking Analyst allows temporal/spatial analysis and interactive playback of existing data that includes time attributes. It also supports real-time data display from a global positioning system or similar technologies.



# **ArcView Network Analyst**—*Optimum Routing, Closest Facility, and Service Area Analysis*

ArcView Network Analyst enables you to solve a variety of problems using geographic networks (i.e., streets, highways, rivers, pipelines, electric lines, etc.) such as finding the most efficient travel route, generating travel directions, finding the closest facility, or defining service areas based on travel time.

# **ArcView StreetMap**—Address Matching and Street Mapping for the USA

ArcView StreetMap<sup>™</sup> software adds nationwide (USA) street map display and address geocoding to ArcView GIS. Based on Geographic Data Technology's Wessex Streets database (enhanced TIGER® 97 data), ArcView StreetMap includes a compressed street and landmark database for the entire United States on a single CD.

# **ArcView StreetMap 2000**—*Advanced Address Matching and Street Mapping for the USA*

ArcView StreetMap 2000 is an enhanced version of ArcView StreetMap. Based on the GDT® Dynamap/ 2000® street database, Streemap offers the most comprehensive and up-to-date U.S. street and address data available today. The extension also includes a compressed street and landmark database for the entire United States on a single CD.



# ArcView Tracking Analyst FeaturesReview and analyze existing data based on

- time and location.
- Real-time data display and capture.
- Interactive playback.
- Trigger actions or events based on location or proximity to other geographic features.

#### **ArcView Network Analyst Features**

- Access geographic network data based on ArcInfo coverages, shapefiles, or CAD drawings.
- Find the most direct route between two locations, or find the best way to visit several
- locations.Generate clear, concise directions including
- Iandmarks.Create service area territories based on
- travel time or distance.
- Find the nearest facility

Address matching.

- Perform drive-time analyses.
- Use Avenue classes and requests to automate tasks, add new capabilities, and build applications.

ArcView StreetMap

the USA; maps automatically adjust to scale.

· Interactive or batch address matching.

Interactive address correction editor.

Streets database for the USA.Automatic basemap creation for anywhere in



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# ArcView StreetMap 2000

- High-performance address matching.
  Batch or interactively match locations or
- Datch of interactively match locations of intersections.
   Comprehensive, interactive address corrections
- tion editor.
- Most up-to-date streets database for the USA.
- Automatic basemap creation for anywhere in the USA.
- Maps automatically adjust to scale.

# **ArcView Business Analyst**—*Integrated Business*

Geographic Solutions

ArcView Business Analyst is a unique integration of software and data in one easy-to-use package. The easy-to-use wizard-based interface guides you through sophisticated business tasks. With all the data and analysis procedures built in, you can focus on results rather than the details of the underlying technology.



#### **ArcView Business Analyst Features**

- · Locate customers by address.
- Create and analyze market areas.
- Create/Identify trade areas.
- Analyze customer profiles.
- · Identify prospects for target marketing.
- Locate new stores.
- Compute equal competition areas. Determine market penetration.
- Perform site prospecting.
- Create simple or complex ring analysis for locations
- Produce detailed comprehensive reports.

## **ArcPress for ArcView**—*High-Performance* Printing and Plotting

ArcPress<sup>™</sup> for ArcView is a graphics metafile rasterizer that enables ArcView GIS users to optimize their capabilities for printing highguality maps. Using the ArcPress extension, any map layout or view within ArcView GIS can be sent easily to high-quality printers or export formats while maintaining a consistently highquality output.



#### ArcPress for ArcView Features

- Convert metafiles into native printer raster languages for many common printing devices
- · Generate plots from complex raster and vector data.
- Expedite throughput and printing processes. Reduce extraneous overhead costs (e.g., RAM, firmware).

# **ESRI Business Partner** and Third Party

## ArcView GIS Extensions

ESRI business partner and third party programs offer a variety of GIS products and services to help you implement and maintain your GIS successfully. ESRI business partners offer solutions for specific industries and extension tools for ArcView GIS software.

Visit www.esri.com/partners for a complete description of the ESRI business partner and third party programs including participating firms and available ArcView GIS extensions.



Business Partner Extensions
A/E/C
Agriculture
<ul> <li>AM/FM (utilities)</li> </ul>
<ul> <li>Business and Retail</li> </ul>
<ul> <li>Environmental Management</li> </ul>
<ul> <li>Federal Government</li> </ul>
GIS Services
• Health
<ul> <li>K—12/Library Programs</li> </ul>
<ul> <li>Law Enforcement/Criminal Justice</li> </ul>
Local Government
Manufacturing
<ul> <li>Military and Intelligence</li> </ul>
Mining
Oil and Gas
Petroleum/Pipeline
<ul> <li>Public Safety/Emergency Management</li> </ul>
<ul> <li>Real Estate/Cadastral</li> </ul>
<ul> <li>Telecommunications</li> </ul>
<ul> <li>Transportation</li> </ul>
<ul> <li>University Programs</li> </ul>

Business Bartner Extensions

Water/Wastewater

# **Application Development**

apping and GIS professionals are leveraging the power of ArcView GIS software for developing custom applications.

ArcView GIS provides the tools you need to create specialized solutions for your mapping and GIS applications. Using Avenue, ArcView GIS software's built-in, object-oriented scripting language, application developers and in-house programmers can quickly modify the user interface, create scripts, build custom tools, and complete solutions to support specific departments or applications in an organization.

ArcView GIS includes a rich suite of tools that allows the Avenue programmer to build custom dialogs within ArcView GIS. Standard form controls, such as command buttons, radio buttons, list boxes, slider bars, and icons, are available.

With Avenue, you can customize part or all of ArcView GIS to meet the needs of end users. For example, you can add a new tool to the ArcView GIS interface that performs a function specific to your business, or you may want to create a complete turnkey application based on ArcView GIS software.



Hundreds of partner solutions and extensions are available.

#### **Avenue Features**

- Object-oriented scripting language specifically for GIS.
- Interactive graphic user interface (GUI) editing tools.
- User automation of routine or repetitive tasks.
- Deliver custom interfaces or applications as self-contained extensions.
- Direct support for dynamic link libraries (DLLs), remote procedure calls (RPCs), and dynamic data exchange (DDE).



Build a system specific to your business.

# **Building ArcView GIS Solutions**

ArcView GIS—A Stand-Alone Solution or Part of an Integrated Solution

# Do It Your Way

ArcView GIS-based analysis can be performed by individuals, project teams, departments, divisions, or throughout entire organizations. ArcView GIS can be used as stand-alone software or as part of a network-based application.

# The Four Architectures of GIS



Project GIS



Departmental GIS



Enterprise GIS



#### Internet GIS

# Project GIS

- Everything you need is on your desktop.
- Use ArcView GIS to perform project-level mapping and analysis.
- Use the data that is included with ArcView GIS software or create your own.
- Link data from other applications to maps.
- Expand analysis capabilities with ArcView GIS optional extensions.

## **Departmental GIS**

- Link your organization's data to your maps.
- Integrate data from different departments.
- GIS data sets are maintained and managed centrally.
- Build desktop applications that let people work with shared data.
- Deploy your shared data throughout your organization to leverage your existing investments.

## Enterprise GIS

- GIS data sets are managed as a core information resource in the enterprise.
- GIS databases are stored in your enterprise database management system using ESRI's ArcSDE, allowing maps to be managed like any other data.
- ArcView GIS is used as a client to get rapid desktop access to these very large GIS databases.
- Lets you build client/server desktop mapping applications.

# Internet GIS

- A common platform to disseminate and exchange data via the Internet.\*
- Easy-to-use authoring and design framework.
- Map Notes, Edit Notes, feature streaming, local geoprocessing, and more.
- Leverage your GIS investment by publishing and distributing data on the Internet.

\*Requires ArcIMS—licensed separately.

# Data

Content for Your GIS Applications



European Data



Five-Digit ZIP Codes

# ESRI Data & Maps CDs

*ESRI Data & Maps* is a multi-CD set of ready-to-use data that is bundled with ArcView GIS. Included are many types of map data at many scales of geography provided in a shapefile format. The data can be directly read from the CD–ROMs.

The CDs include data for the world, including Mexico, Canada, and European countries, as well as general data for the United States, detailed data for the entire United States, and very detailed data for U.S. regions.

# ArcData

ArcData<sup>™</sup> is a global data publishing program in which data providers license their data sets in ready-to-use formats compatible with ESRI software. ArcData providers include commercial data publishers, government agencies, notfor-profit organizations, universities, and ESRI software users.



# ArcData Online

ArcData Online is ESRI's Internet mapping and data site. A wide assortment of geographic data is available. Users can download free data and license commercial data directly from this Web site.



# ArcData Guide

Use the online ArcData Guide to find geographic data for your ESRI software. The ArcData Guide offers comprehensive information on data sets from commercial vendors, government agencies, nonprofit organizations, universities, and other ESRI software users wishing to distribute their data sets.

# **Other Data From ESRI**

ESRI focuses on publishing data sets that provide the basic data that may be needed as a framework for building your GIS database and data sets that help people learn about GIS and GIS data.



Visit **www.esri.com/data** for a description of ESRI's data programs and for links to other Web sites.

# **User Support**

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