# GIS Web Services Available from ESRI

## Now Web Developers Can Seamlessly Integrate GIS Services with Web-Enabled Applications

ESRI, the world leader in geographic information system (GIS) and mapping software, has recently augmented its product line with a rich collection of GIS functionality for developers to use in enhancing their Web applications. From simple mapping to complex vehicle routing, the GIS Web Services available from ESRI make developing lightweight, Web-enabled applications simpler and faster than ever before.

#### **GIS Functionality On Demand**

GIS Web Services are self-contained, modular components and applications that can be published and accessed over the Web. They typically perform a specific GIS function that can be integrated as part of a larger application. ESRI's GIS Web Services let developers quickly integrate functionality into their applications without having to build or host the functionality locally, often resulting in significant savings of time, money, and disk space.



Wireless application using ESRI address finder and mapping services.

ESRI has deployed a set of GIS Web Services that provides mapping and location services for use in Web-enabled applications. These GIS Web Services deliver some of the most popular GIS capabilities, such as address matching, routing, and proximity, for easy integration into a wide variety of developer solutions.

#### ESRI<sup>®</sup> GIS Web Services on the Geography Network<sup>™</sup> Include

- **Mapping.** ESRI provides access to a wide variety of dynamic maps for locations across the United States and throughout the world. The maps include detailed streets, satellite imagery, business demographics, environmental hazards, topographic maps, and much more.
- Address Finder. ESRI provides tools to determine the latitude/longitude coordinates for U.S. street addresses. The results of these address requests can be used to generate maps or reports of the location using local data or other services.
- Place Finder. The Place Finder lets users input a place name and receive a ranked candidate list of place names and associated latitude/longitude coordinates. The service is built on a database of more than three million places in the world and is intended to support "find a place" functionality for applications.
- Driving Directions. This service lets users generate multipoint driving directions between user-defined locations. The routing service accepts latitude/longitude inputs for two or more locations, along with routing preferences, and returns textual driving directions for the suggested route.

### www.esri.com



ArcGIS<sup>™</sup> using ESRI Place Finder service to navigate map.

- **Proximity.** Proximity services can return information about places or events that are within a user-defined proximity of a specified location. They can be integrated with various data sources to provide information about businesses, hazards, facilities, or other items within a certain distance of a location.
- **Reporting.** Reporting services can be used to determine the physical, environmental, or cultural characteristics of a specific location. They can be integrated with various data sources to collect information about a location (e.g., is this point in a flood hazard area, or what is the demographic profile of this area?).

#### Using GIS Services on the Internet

GIS Web Services can be accessed from any Web-enabled application. This includes desktop applications, such as those built with MapObjects<sup>®</sup> or ArcGIS components, as well as Web applications, commonly built with Java<sup>™</sup> or ASP. If the application can connect to the Web, a developer can integrate GIS Web Services from ESRI.

ESRI's GIS Web Services are deployed through standard Web protocols including HTTP and XML. They use the XML-based Simple Object Access Protocol (SOAP) to communicate, and therefore, they are compatible with the majority of Web services frameworks available today such as Microsoft's .NET.

Established two years ago as a Web-based portal for sharing spatial data and services over the Internet, www.GeographyNetwork.com has rapidly become the place on the Internet where GIS users look first for data. In addition to serving as a clearinghouse for a variety of data sets, the Geography Network also provides access to a number of GIS Web Services. ESRI's Geography Network is powered by a variety of leading-edge technologies for Internet mapping and is designed to provide very high capacity and availability for mapping and location services. To provide full system redundancy, the system consists of two complete and separate configurations maintained at different locations in the United States.



Browser-based Customer Locator application built using ESRI mapping, address finder, and driving directions services.

ESRI offers GIS Web Services on the Geography Network for access by developers and their customers. A Service Level Agreement (SLA) is established between ESRI and the developer. Developers pay for transactions, which are individual requests to and responses from the specific GIS Web Service. Developers can purchase blocks of transactions or subscribe for unlimited access for a specified duration.

For more information, please visit www.GeographyNetwork.com/geoservices or contact ESRI at 1-800-447-9778. Outside the United States, please contact your local ESRI distributor.



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