

StreetMap™ Mobile Software Developer Kit

Build and Deploy Custom Mobile Mapping and Navigation Applications

ESRI® StreetMap™ Mobile Software Developer Kit (SDK) is available to ESRI business partners who want to develop custom mobile mapping and navigation applications for devices such as in-vehicle systems or personal navigation devices.

The StreetMap Mobile SDK consists of a set of COM components and developer resources and provides advanced functionality for deploying routing, geocoding, map rendering, and map matching applications. Functionality to support internationalization of navigation applications is included such as international language characters for routing directions and the ability to geocode addresses. The StreetMap Mobile SDK is fully Unicode compliant for international language support.

Routing

The StreetMap Mobile SDK allows developers to include multi-point routes, door-to-door driving directions, and quickest or shortest route selection. Barriers, such as road closures, construction, or traffic incidents, can be defined as well as which roads should be used in route calculations based on type of road or vehicle type and size. Additional routing functions include

- Trip planning
- Highway preference/avoidance
- U-turn allowance/avoidance
- Toll road/ferry/tunnel/bridge avoidance

Geocoding

With the geocoding engine included in StreetMap Mobile SDK, you can

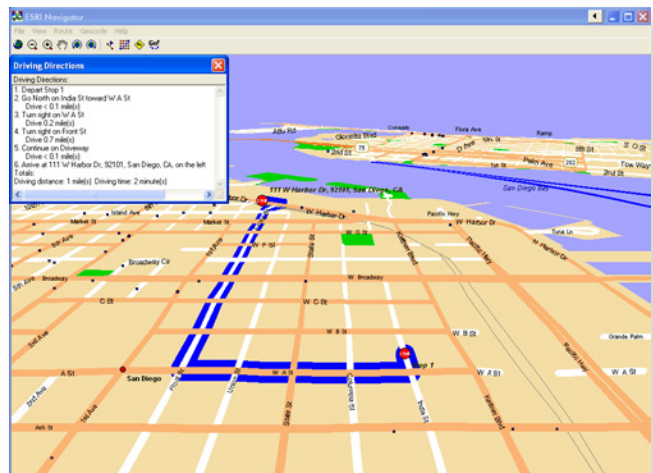
- Geocode by address, cross street, city, or postal code.
- Perform reverse address geocoding.
- Search for points of interest.
- Geocode international addresses for more than 30 countries.

Map Rendering

Developers using the StreetMap Mobile SDK can access spatial and attribute data and optimize spatial queries for quick display. A rich symbology library, labeling engine, and the ability to implement scale- and class-dependent rendering allow developers to generate attractive and display-friendly maps. Other map-rendering functions include the ability to rotate a map display.



Customize your navigation application for night mode use



High-performance geocoding provides accurate turn-by-turn driving directions

Map Matching

StreetMap Mobile SDK provides the ability to perform map matching to accurately track the location of a mobile device. The position of the device can be snapped to the closest street segment and tracked based on GPS coordinates, direction of travel speed, and GPS signal latency.

Street Data

StreetMap Mobile SDK requires street data in ESRI's Smart Data Compression (SDC) 2.0 format. SDC is a compressed binary file format directly accessible through ArcGIS® software products. Compression ratios range from 8x to 20x depending on the data source and structure. SDC data is optimized for rapid map display, accurate routing, and high-performance geocoding.

Both Tele Atlas and NAVTEQ® provide North American commercial street datasets in SDC format. These datasets include complete cartographic layers such as hydrographic and cultural features. SDC data is available from ESRI, or you can convert data from any source into SDC format with ESRI's DDK Pro software.



In-vehicle custom navigation system built with StreetMap Mobile SDK



Using street data in SDC format for rapid map display

Supported Platforms

- Windows® 2000/XP
- Windows Mobile 2003/2005
- Windows CE 4.x/5.0 OEM (custom builds)



Perform tracking using GPS functions such as travel speed and signal latency



For more information about ESRI solutions, call **1-800-447-9778**.

Send e-mail inquiries to smmobile@esri.com.

ESRI StreetMap Mobile SDK is available exclusively to members of the ESRI Business Partner Program. To learn how to become a business partner, visit www.esri.com/partners.

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