

Criteria for selecting spatial information system software

Program name	GIS X
Manufacturer/distributor	Company X
Manufacturer's phone number	
Cost per seat	
Date of first release	
SOFTWARE FEATURES	
Operating system/network support	
<ul style="list-style-type: none"> • Network client/server support 	
<ul style="list-style-type: none"> • Server operating system 	
<ul style="list-style-type: none"> • Client operating system 	
<ul style="list-style-type: none"> • Internet server enabled 	
GIS data administration	
<ul style="list-style-type: none"> • Multi-user edit locking 	
<ul style="list-style-type: none"> • Versioning 	
<ul style="list-style-type: none"> • Metadata maintenance 	
Database management	
<ul style="list-style-type: none"> • Proprietary DBMS 	
<ul style="list-style-type: none"> • Relational database management system 	
<ul style="list-style-type: none"> • RDBMS spatial data warehouse 	
Native Graphic Data Structure and Format	
<ul style="list-style-type: none"> • Vector – spaghetti 	
<ul style="list-style-type: none"> • Vector – topologic 	
<ul style="list-style-type: none"> • Parametric 	
<ul style="list-style-type: none"> • 3-D 	
<ul style="list-style-type: none"> • TIN 	
<ul style="list-style-type: none"> • Grid 	
<ul style="list-style-type: none"> • Raster image 	
GIS data import/export utilities	
<ul style="list-style-type: none"> • Direct import formats 	
<ul style="list-style-type: none"> • Direct export formats 	

continued

Criteria for selecting spatial information system software (continued)

GIS data entry and editing	
• Board digitising	
• Coordinate geometry/precision entry	
• Electronic survey data import	
• Heads-up digitising	
• Vectorisation	
• Map rectification	
• Graphic error check/correction	
• Field data entry	
Map design and composition	
• Interactive map composition	
• Annotation from attributes	
• Global symbol change	
• Thematic mapping	
Geographic query and analysis functions	
• Attribute query and selection	
• Map measurements	
• Address matching	
• Buffer generation	
• Point/line-in-polygon analysis	
• Polygon overlay	
• Network analysis	
• Raster document query and access	
• Direct access to other GIS format	
Terrain data processing and analysis	
• Digital elevation model (DEM) generation	
• Contour map generation	
• 3-D display/profile generation	
• Map draping	
• Slope/aspect analysis	

continued

Criteria for selecting spatial information system software (continued)

Raster image capabilities	
• Geometric rectification	
• Orthoimage generation	
• Image enhancement	
• Spectral classification	
Application development language	
• Proprietary application development language	
• Industry standard programming environment	