

Information Sharing and Distribution

- 1) Enterprise (geo)databases: centralized storage, data quality, data sharing.
- 2) Geospatial-enabled portals (data, tools): metadata, index.
- 3) Data interoperability: standards, ontology, semantics.
- 4) Integrator: georeferenced health records, genomic, environmental, socio-economic, social media, etc.
- 5) Community building

Location Based Service and Application

- 1) Tools: standalone, GIS-based.
- 2) Web tools: statistics/modeling functions.
- 3) Mobile tools: service-oriented.

Spatial Analytics

- 1) Spatial analysis (interactive, static): cartography, manipulation.
- 2) Spatial statistics: patterns, hot/cold spots, regression, smoothing, etc.
- 3) Spatial data mining: clustering (grouping), PCA, association.
- 4) Social network
- 5) Spatial modeling