Information Management and Information Assurance
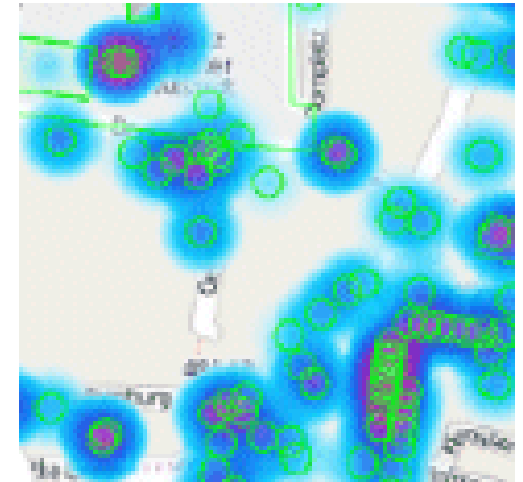
Collection and Analysis

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Geospatial Information
Basic Considerations

- Location – Location – Location
- Good – Bad – Noise
- Convergence of Evidence
- Confidence Assessments
- Decision to Add to the Decision Tree
- Metadata
- Time and Space – Movement and Spread
- Network is a Network
- Patterns – visualization
- Where? Address; National Grid; Lat-Long; Landmark
- Symbology and Representation

Geospatial Information Science & Technology

- GIS – Everything happens somewhere
  - Viewing interactions in time and space of events (real-time?)
  - Data models – status is everything

- Volunteered Geographic Information (VGI)
  - Devices and formats: video; text; tweets; positions; facebook; sensors
  - Sensor web: video cams; sniffers; humans
  - All source versus weighted approaches

Geospatial Information Science & Technology

- Emerging Elements –
  - Supercomputing
  - Data Mining
  - Compression & Transmission
  - Complex system modeling

- High-Speed Internet Access
  - Georeferenced public health information
  - Web standards – OpenGIS; GML/XML; GeoRSS

Geospatial Information Analysis Considerations

- Demographics
- Cultural Context – language; ethnicity
- Zones and Movement – networks or space
- Confidence – how measure and communicate
- Visualization – time and space; colors; breaks
- Symbology – standards by sector?!
- Plume Analysis – Wind; run-off; karst
- Network Analysis – roads to relationships
- Human – Health Issues; Bariatrics; Sex Offenders; Gangs;

Geospatial Information
Health Analysis Considerations

- Do we know normal? What does it look like?
- Issues related to privacy and geocoding?
- 'Practice' tracking common events – syndromic surveillance?
- Security surrounding 'exposed' shared services? Controls?
- Public Access / Media Access and transparency?