Background: The CDC’s mission is to protect the health of the nation through research, prevention, treatment and education. The CDC uses geospatial information and technology in the tracking, prevention of and response to health problems both internationally and domestically.

Value Statement: Geospatial information and technology are integral to nearly all aspects of CDC’s mission. Person, place and time are three key concepts in epidemiological studies, and GIS can leverage them together to save lives. In order to maximize its use of geospatial resources, CDC created an Enterprise GIS Office that coordinates the use of GIS data and software across the agency. CDC’s Enterprise GIS implementation has helped the agency better manage data derived from numerous government and private sources. Improving geospatial data management helps GIS analysts across CDC to model factors affecting health and disease transmission in a target area. Additionally, CDC’s enterprise GIS consolidated software license across the organization, which saves over $100,000 per year and many hours of procurement work.

Challenges: As a decentralized organization, the CDC faces a particular challenge in sharing geospatial information and datasets across various centers and project teams within the organization. Analysts consistently need a large number of seemingly unrelated datasets in order to capture a full picture of factors that may affect health. CDC also faces restrictions in sharing much of its data due to privacy concerns.

How Has CDC’S Enterprise GIS Addressed These Challenges?
- CDC created an Enterprise GIS Coordination Office to help streamline data sharing and software maintenance. Specifically, the Enterprise GIS Coordination Office is responsible for:
  - Consolidating GIS software licenses as well as software procurement and maintenance
  - Facilitating geospatial information sharing within the CDC, with other US government agencies, international governments and organizations

What Functions Does CDC’s Enterprise GIS Provide?
- Provides a range of geospatial applications to CDC employees from GIS software, statistical software to remote sensing capabilities
- Increases awareness of data sets available to employees and identifies opportunities for coordinating data collection and use
- Facilitates the sharing of CDC data with the public through the National Health Data Center
- Supports mapping for proactive health monitoring, prevention of disease, public health response and disaster recovery

How Does CDC Use GIS?
- Mapping in Myanmar after the 2008 Cyclone to guide disaster relief efforts
- Plotting the age of homes and socio-economic indicators to determine where funds to address harmful lead paint should focus
- Placing roads, cities, travel paths, animal migratory patterns and other data layers on a map to assist in predicting and controlling infectious disease outbreaks

For Additional Information, Please Contact:
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