



GIS Hallmarks

Maximizing the benefits of GIS for chronic disease prevention and health promotion.

Chronic disease prevention leaders recognize the tremendous benefits of using geographic information systems (GIS) for a wide range of public health goals – ensuring opportunities for optimal health for all, documenting the burden of disease, enhancing the efficiency of program and policy planning, and more!

However, little guidance is currently available regarding how to build an infrastructure that supports routine use of GIS for chronic disease prevention.

The GIS Hallmarks are a compilation of key policies and practices that maximize the benefits of GIS for chronic disease prevention and health promotion.

The GIS Hallmarks are organized into three categories:

Building a GIS Savvy
Workforce

Building GIS into Chronic
Disease Prevention Work

Building GIS-Ready Tools
& Resources

The GIS Hallmarks were developed by Chronic Disease Directors and NACDD Council members as part of the GIS Capacity Building Project in collaboration with CDC and Rice University.

Acknowledgements:

Chronic Disease Directors: Tomás Aguilar, Pennsylvania Department of Health; Nimisha Bhakta, Texas Department of State Health Services; Ryan Lester, Kansas Department of Health and Environment; Shamarial Roberson, Florida Department of Health.

Cardiovascular Health Council: Rachael Austin, New York State Department of Health; Kristina Dawkins, Michigan Department of Health and Human Services; Cheryl Farmer, Washington State Department of Health; Vivian Lasley-Bibbs, Kentucky Department for Public Health; Robin Roberts, Michigan Department of Health and Human Services; Desiree Jonas, Florida Department of Health; Shelby Vadjunec, Wisconsin Department of Health Services

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Building and Supporting a GIS-Savvy Workforce



RECRUITMENT

Recruitment of staff with GIS skills is ongoing.



HUMAN RESOURCES

GIS-related skills are factored into job descriptions, questionnaires, interviews and selections.



PROFESSIONAL DEVELOPMENT

Training and professional development opportunities related to GIS are provided regularly.



TIME ALLOCATION

Time is allocated/protected for GIS training and mapping efforts.



GIS WORKGROUPS

Participation in GIS user workgroups is encouraged and supported.



GIS SKILLS RECOGNIZED

Application of and development of GIS skills is recognized.



GIS FOR ALL

Non-GIS users, including programmatic staff, learn how to use maps and other GIS products.



SHARING GIS WORK

GIS users are supported to pursue opportunities to share their GIS work widely.



GIS LEADERSHIP

A GIS leadership position is established.



INVESTMENTS IN GIS WORK

Administrative and financial investments are made to support GIS staff and work.

Visit these websites for examples of how GIS is being used for chronic disease prevention:



www.cdc.gov/dhdsp/maps

www.chronicdisease.org/GIS

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Building GIS Use into Chronic Disease Prevention Work



ROUTINE USE OF GIS and MAPS

GIS data, products and maps are routinely developed, translated and disseminated to:

- Enhance Surveillance
- Inform policy and program decisions
- Identify common geographic priorities with partners
- Tailor interventions to community needs
- Identify upstream factors
- Coordinate resources
- Reduce duplication



COMMUNITY CHARACTERISTICS

GIS are used in daily work to consider how barriers, environments, and other factors impact health outcomes.



STAKEHOLDER INVOLVEMENT

Stakeholders are routinely engaged in the development, translation and dissemination of GIS products.



GEOGRAPHIC DISTRIBUTION OF ACTIVITIES

The distribution of efforts/activities across small geographic areas is routinely identified.



GIS AT ALL LEVELS

GIS and maps are discussed and used across all levels of administration and in key strategic efforts.

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Building GIS-Ready Tools and Resources



GIS-RELATED PROTOCOLS

Systems, processes, and protocols are implemented for streamlining and standardizing the development, translation and dissemination of GIS data, products, and maps. Systems, processes, or protocols include:

- Determining suppression criteria,
 - Age standardization procedures,
 - Geocoding approaches,
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- Map templates,
 - Standardized shapefiles,
 - Branding elements,
 - Labeling conventions,
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- Health department clearance/ approval processes for GIS products and map dissemination,
 - Map request processes.



ACCESS TO GEOCODED DATA

Access to existing geospatial data or geocoded data is maintained through data use agreements or other methods.



ADDRESS UNMET DATA NEEDS

Options are explored to address unmet GIS data needs through means such as data use agreements with partners.



INVESTMENT IN GIS SOFTWARE AND HARDWARE

Adequate and consistent administrative and financial investments are made in GIS-related technology, including hardware, software, information technology systems, licenses, training and software support.¹



GIS TECHNICAL ASSISTANCE

GIS users have access to GIS technical assistance, resources, and expertise from available sources such as internal sections/departments or state and local agencies.²



UTILIZE EXISTING GIS RESOURCES

A variety of GIS resources are routinely used, such as CDC GIS Resources, Community Commons, County Health Rankings, etc.

Footnotes:

1. See Section 1: Building and Supporting a GIS-Savvy Workforce for staff/personnel financial support.

2. For example, Dept. of Transportation, Dept. of Education, state GIS office, etc.

Visit these websites for examples of how GIS is being used for chronic disease prevention:



www.cdc.gov/dhds/maps



www.chronicdisease.org/GIS