

Building Geographic Information Systems Capacity as a Public Health Competency

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Objectives

- Describe a project focused on GIS capacity building for 2 state health departments working in HDS prevention and treatment
- Identify potential public health collaborations to build GIS capacity
- Learn elements of GIS training that have broad application for different kinds of organizations and agencies
- Understand an ongoing approach for GIS training for public health



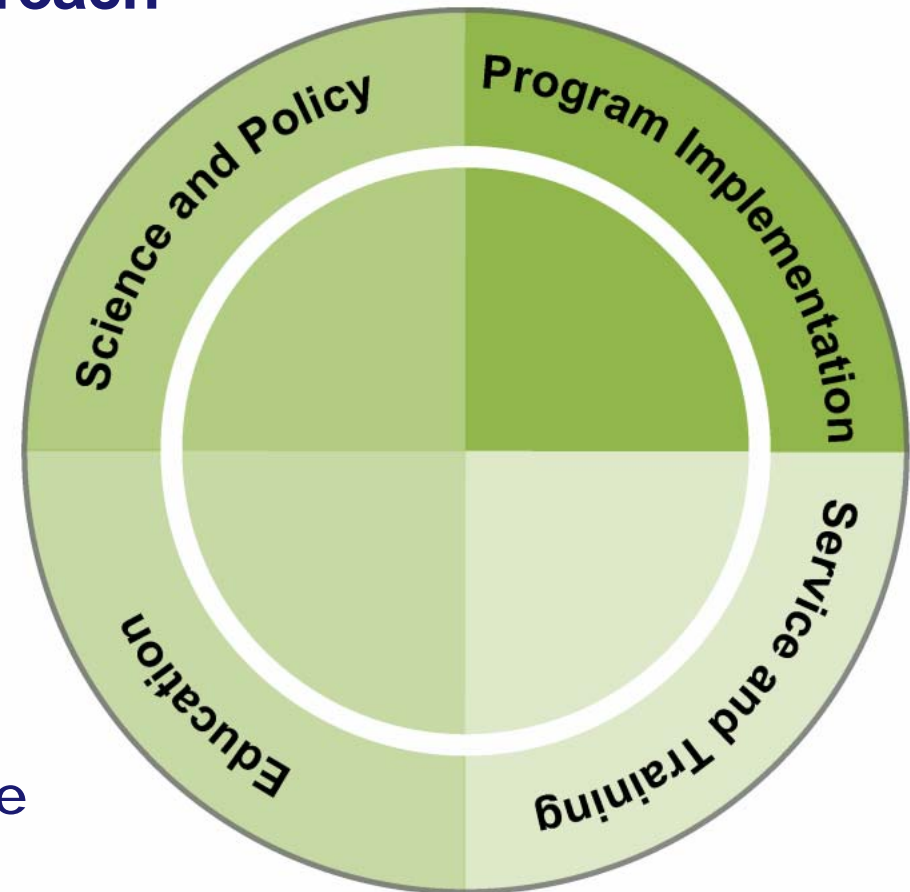
Children's Environmental Health Initiative

CEHI is a research, education, and outreach program committed to fostering environments where all children can prosper



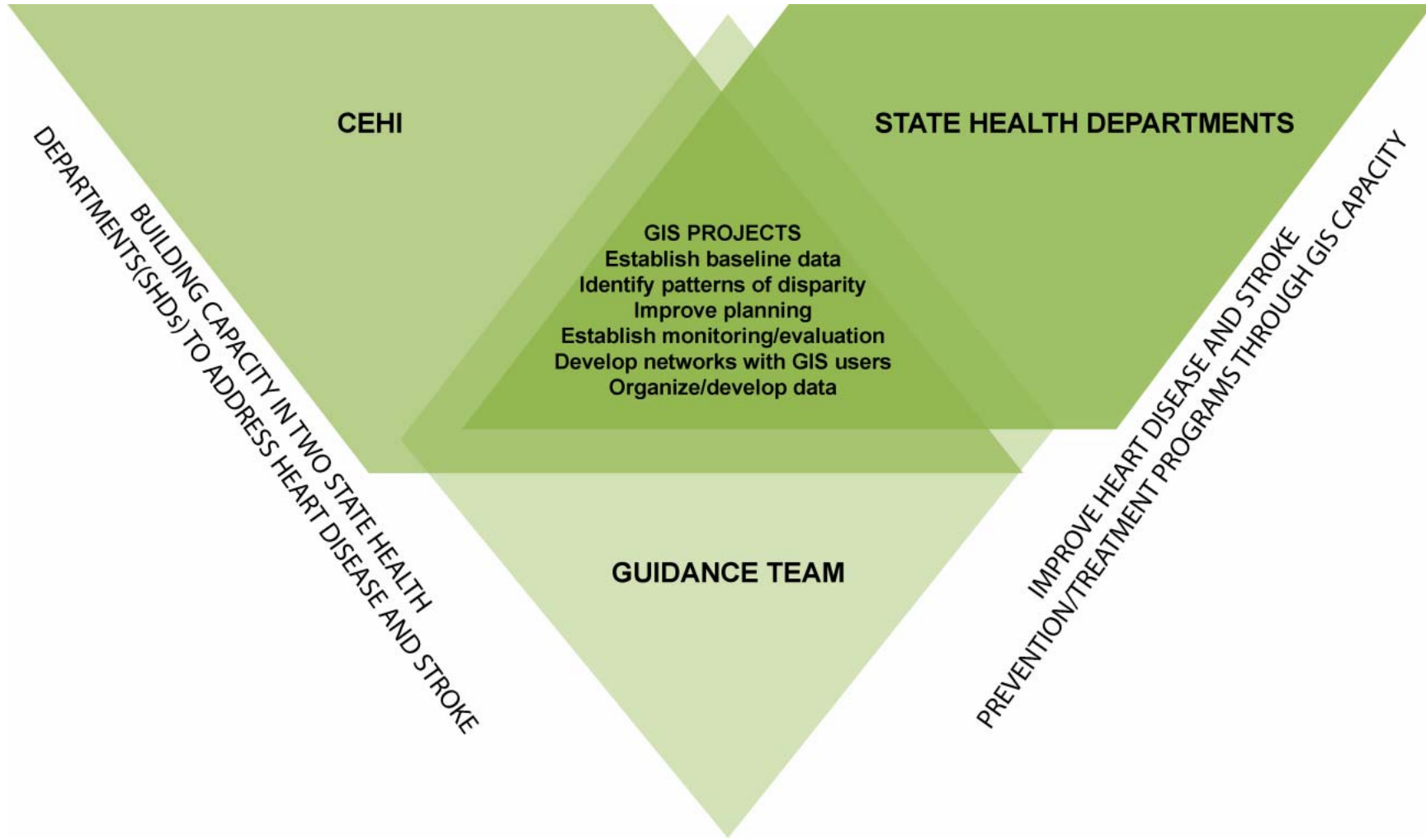
Core Element of CEHI's Outreach

- Preventing childhood lead exposure
- Using GIS approaches to support health and health care
- Building GIS capacity in local health departments
- Building GIS capacity in state health departments to address heart disease and stroke





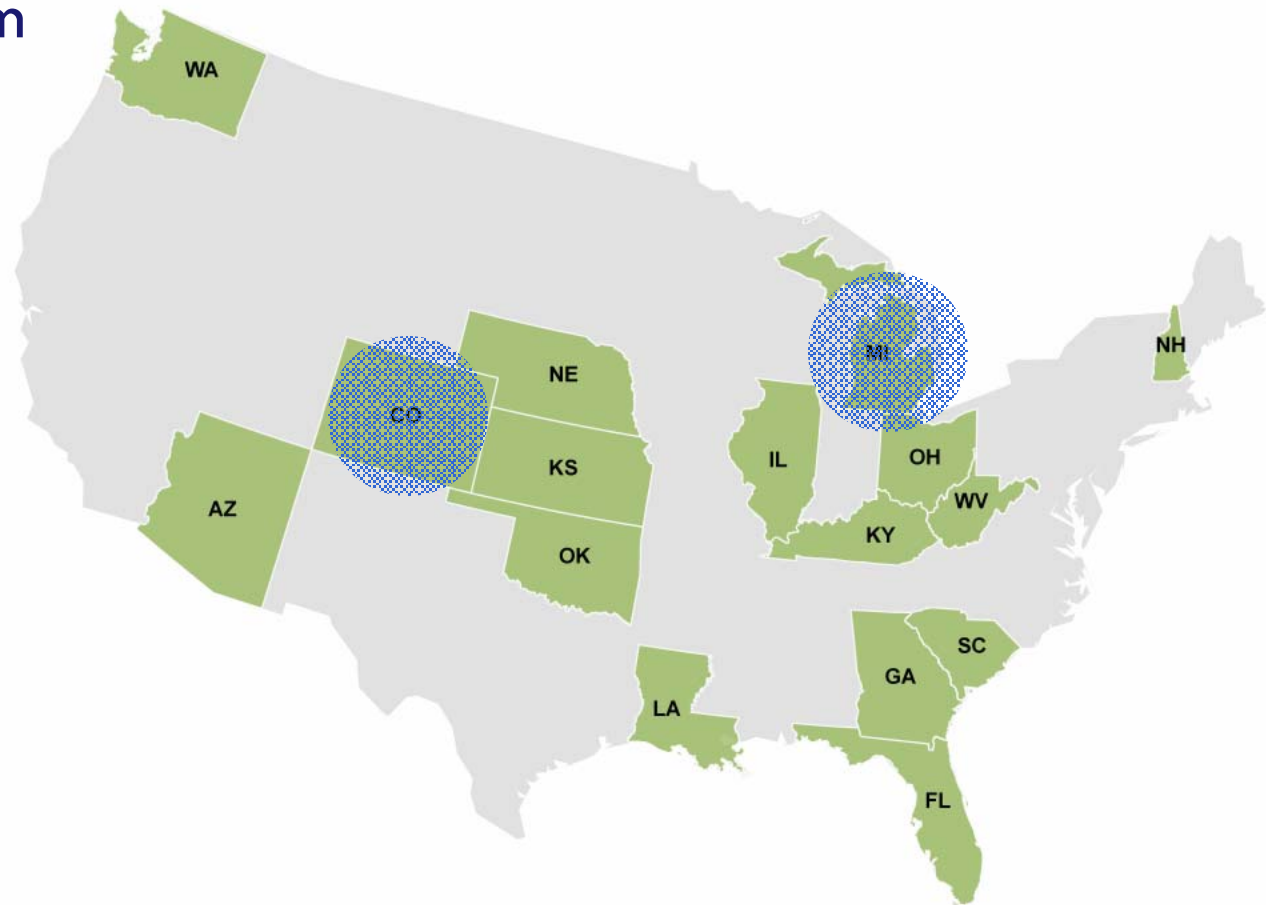
Project Overview





Identify State Health Department Collaborators

- Response from states
- Key elements of program application
- Evaluation of program applicants





Needs Assessment



**Hardware
Software**

**People
Data
Methods**

**HDS Burden
Disparities**

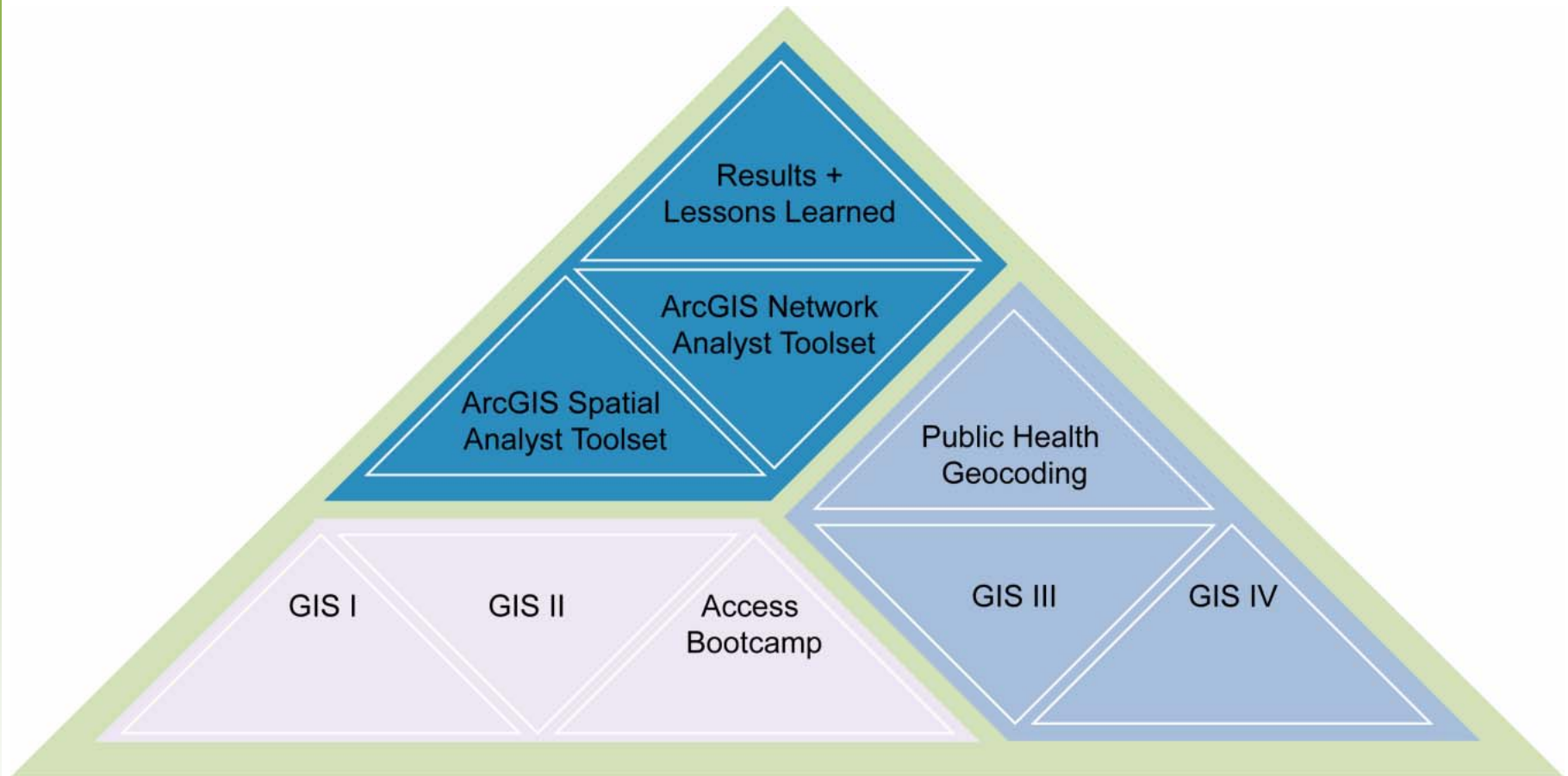


Collaborative Project Development

	Project	Conceptual Framework	GIS Function
3	Evaluate prevention and treatment resources	<i>Loci for intervention</i>	Network/service area analysis
2	Examine risk factors in space	<i>Investigating spatial relationships</i>	Spatial analysis
1	Communicate burden	<i>Organizing and symbolizing spatial data</i>	Display



Module Development





Building Local GIS Networks

- Managerial support
- Diversity among participants
- Local GIS resources
- Sharing results





Lessons Learned to Date

- Flexible purchasing schemes for hard/software;
- SHD team leadership;
- Staff turnover;
- Local GIS support;
- Cost of proprietary GIS software;
- Learning environment; and
- Web-based systems



Acknowledgements

- US Centers for Disease Control
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- Michigan Department of Community Health

