Translation of Sustainability Science to Public Health: Health Impact Assessment

Meeting of the Roundtable on Science and Technology for Sustainability

December 5-6, 2013

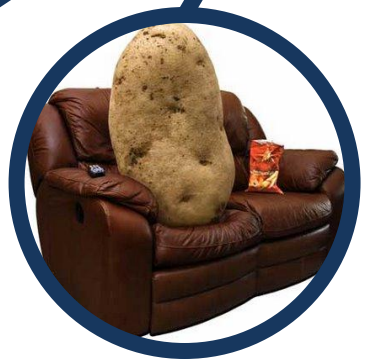
Professor Nisha Botchwey

Georgia Tech
School of City and Regional Planning

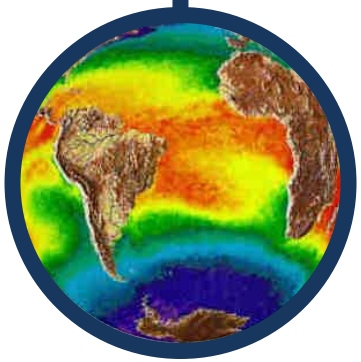
Today's Health Challenges

The major health challenges facing the US today are complex and multifactoral.

obesity



reduced physical activity



climate change

safety

healthy food access

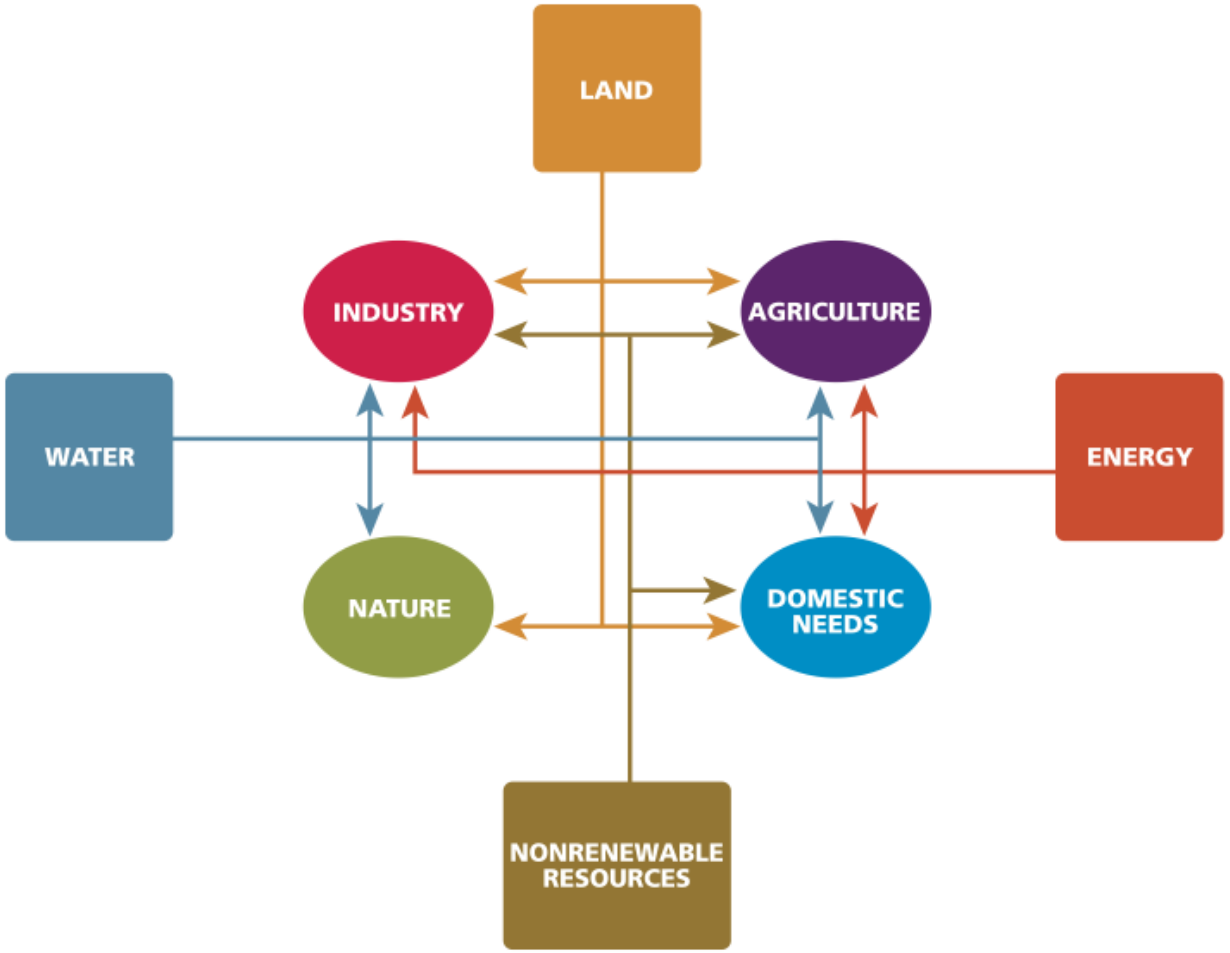
Shaped by External Habitat

We now accept that the health of individuals and communities is shaped by *our environment*.

Responsibility for health cannot lie solely on the health care field.

Other fields need to step in to contribute to *a preventive approach*.

Complex Sustainability Issues



SOURCE: Graedel, T.E., and E. van der Voet, 2010, adapted from Figure 1.2. The links among the needs for and limits of sustainability. Reprinted with permission from the MIT Press.

Health Impact Assessment

HIA is "a combination of procedures, methods and tools by which a policy, program or project may be judged in terms of its potential effects on the health of a population and the distribution of those effects within the population"

HIA is applied to proposed initiatives that do *not* have health as the primary concern. >> economy, agriculture, transportation, …

to minimize potential adverse health outcomes, maximize beneficial health effects & reduce impacts on health equalities.

Example of HIA: Project

Spokane University District Pedestrian/Bicycle Bridge HIA

Example of HIA: Program

Transitional Jobs Program HIA

Example of HIA: Policy

HIA of the Transform Baltimore Comprehensive Zoning Code Rewrite

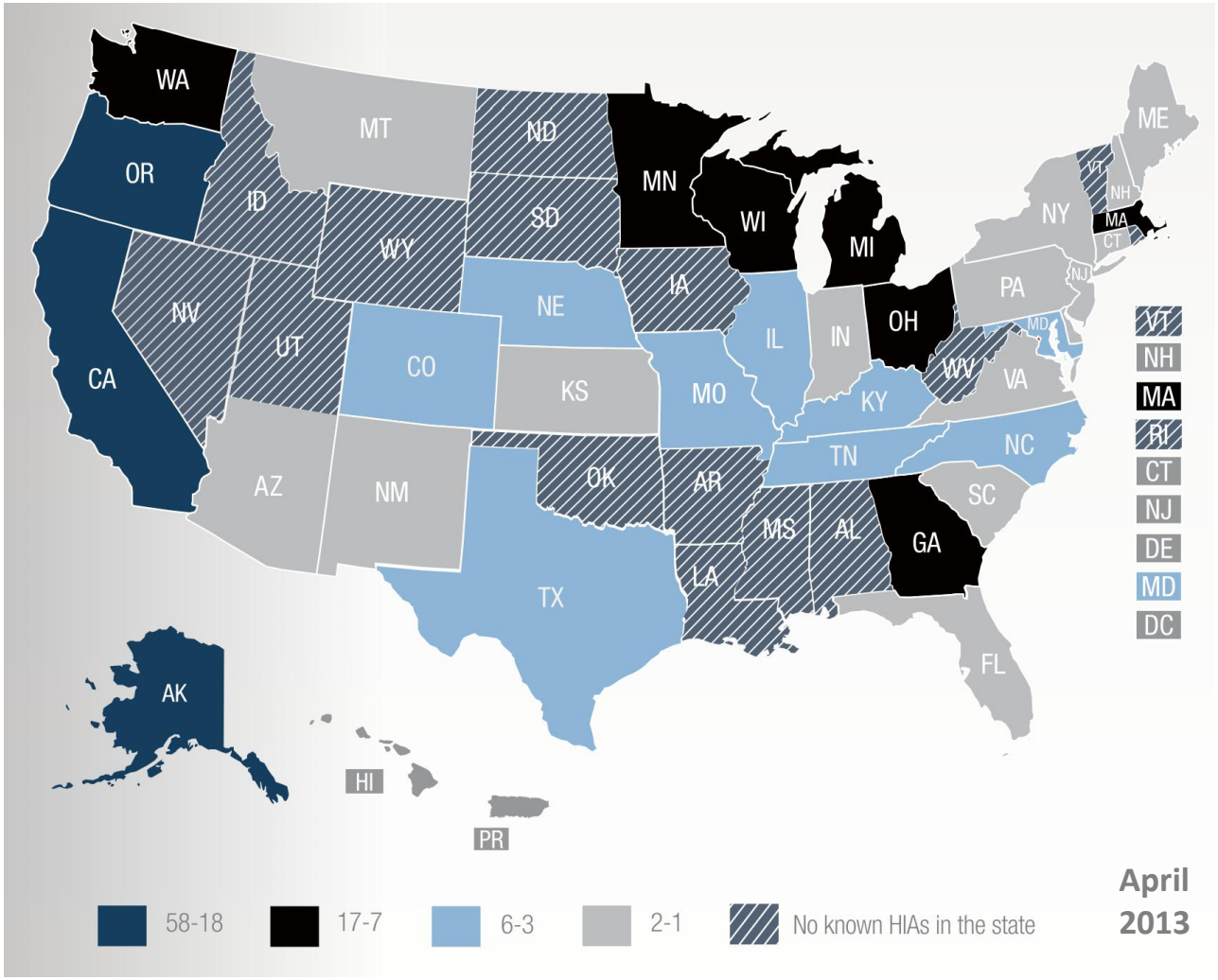
The origins of HIA

Environmental Impact Assessment is mandated by the National Environmental Policy Act (NEPA) of 1969.

Model arises partly out of Environmental Impact Assessment (EIA), an “operational tool to guide planning and decision-making having an impact on the quality of environment and the health and safety of the people.”

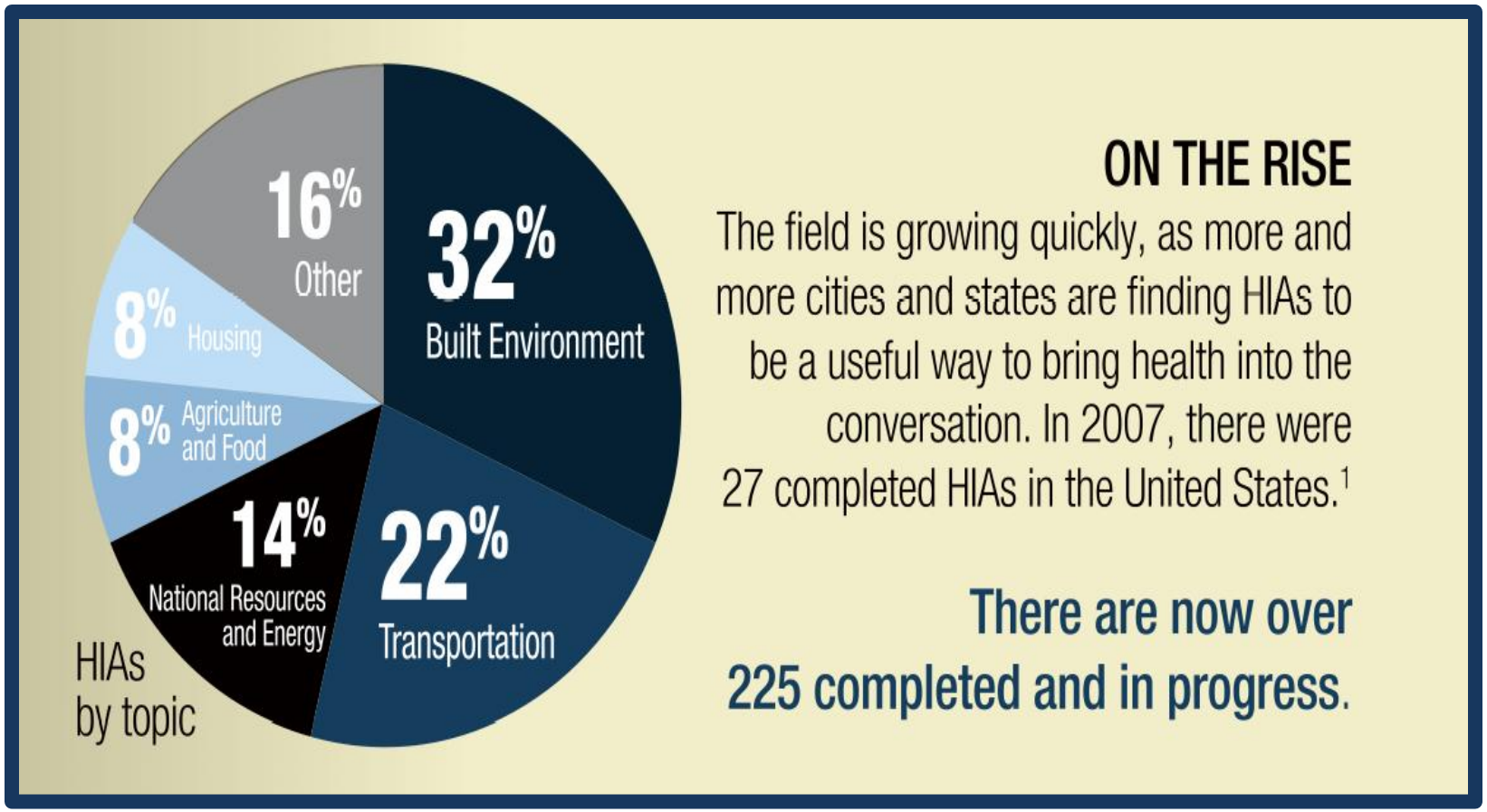
Social Determinants of Health

HIAs by state in the US



Graphic courtesy of the Health Impact Project, a collaboration of the Robert Wood Johnson Foundation and The Pew Charitable Trusts

Sector-wide HIA Distribution



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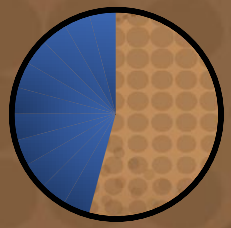
HIA's Core Benefits



makes potential health impacts explicit

helps policy-makers incorporate sustainability

focuses on both positive and negative impacts

reduces financial impact of poor health

supports decision-making

improves cross-sectoral coordination and integration

generates and elucidates health evidence

improves health and reduces inequities

supports community engagement

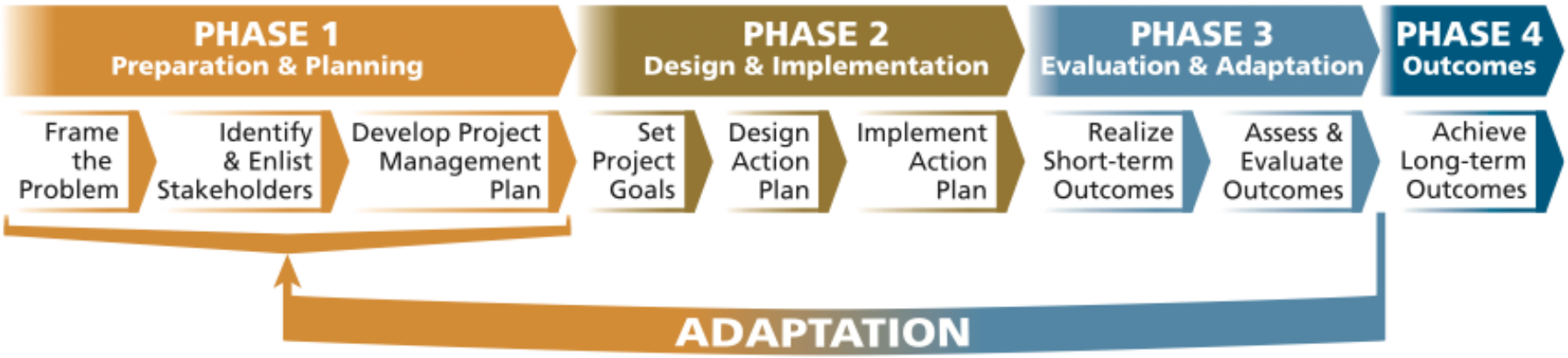
Sustainability Barriers

Barriers to Governing for Sustainability

Currently, several barriers frustrate government efforts to address sustainability challenges such as those described. These obstacles impede agencies' ability to fully consider the connections among resource areas and to build the linkages needed to manage them:

- **The separated and dispersed authority that results from the basic legal framework of government.** Many of the laws that authorize agencies focus on a single mission or a single domain—water or energy, for example—even if the domain is part of an interconnected resource system. The pejorative but accurate description for this fragmentation of authority is the "stovepipe" or "silo" effect: Each agency focuses on implementing its own statutory mandate.
- **Funding mechanisms that favor short-term, single-agency initiatives rather than longer-term, cross-agency projects.** Budgets are prepared on an agency-by-agency basis, and agencies typically promote and defend their own initiatives rather than multiagency initiatives. In addition, congressional appropriations committees are reluctant to appropriate funds for matters they view as the responsibility of another committee, even if those matters relate to the mission of an agency within their jurisdiction.
- **A lack of access to or coordination of foundational elements such as research and information/data.** One of the observed consequences of the silo effect is that agencies have traditionally compiled the data they need or have undertaken research for activities they view as their own, independent of their sister agencies. A similar fragmentation often happens with basic and applied research. While there is some coordination among agencies in constructing research portfolios and making results available, individual agencies generally undertake research within their silos, tailored to their own needs and programs.
- **The culture of government,** which tends to encourage agencies and their personnel to "stay in your lane"

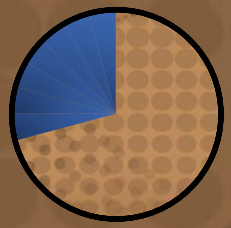
Framework for Sustainability



Strategies to HIA Success

A dedicated HIA team with sustainable funding - “HIA Unit”	“Sustainability Unit”
Sector-specific HIA leads or “champions”	“Sustainability Leads”
A phased approach to implementation that begins by demonstrating value and experience in HIA	“… in sustainability”
Statutory requirement for HIA	“… for sustainability”

HIA Remaining Questions



- What difference has HIA made in the USA?
- What is the value of HIA?
- What needs to be done to increase understanding and acceptance of HIA among decision makers, HIA practitioners and the lay public?
- How should HIA be financed to allow it to be thoroughly integrated in decision-making and planning, and a sustainable and readily used tool?
- What is the most effective strategy for training departments of planning, public health, health care professionals and others to conduct HIAs?
- How do we continue to develop and identify the knowledge and skills critical to the growth and use of HIA?
- How do we expand the network of professionals and healthcare providers to engage with other stakeholders and professions outside the health profession trained to conduct HIAs?

Sustainability Questions

- What difference has Sustainability made in the USA?
- What is the value of Sustainability ?
- What needs to be done to increase understanding and acceptance of Sustainability among decision makers, Sustainability practitioners and the lay public?
- How should Sustainability be financed to allow it to be thoroughly integrated in decision-making and planning, and a sustainable and readily used tool?
- What is the most effective strategy for training departments of planning, public health, health care professionals and others to conduct Sustainability ?
- How do we continue to develop and identify the knowledge and skills critical to the growth and use of Sustainability ?
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