Sustainability, Human Health and Well-Being

NAS Roundtable on Science and Technology for Sustainability
December 6, 2013
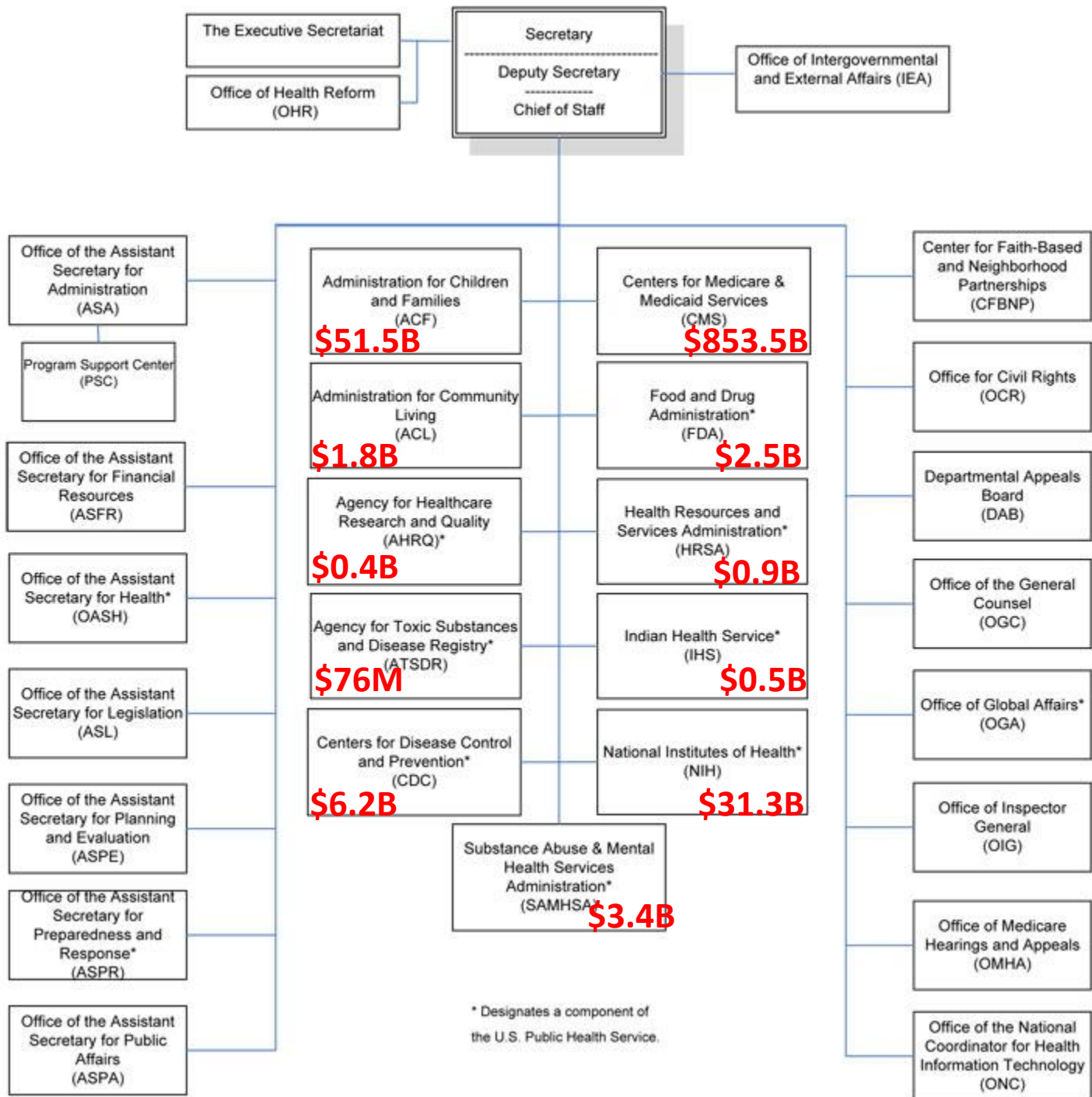
Howard Frumkin, M.D., Dr.P.H.
Dean, School of Public Health
University of Washington

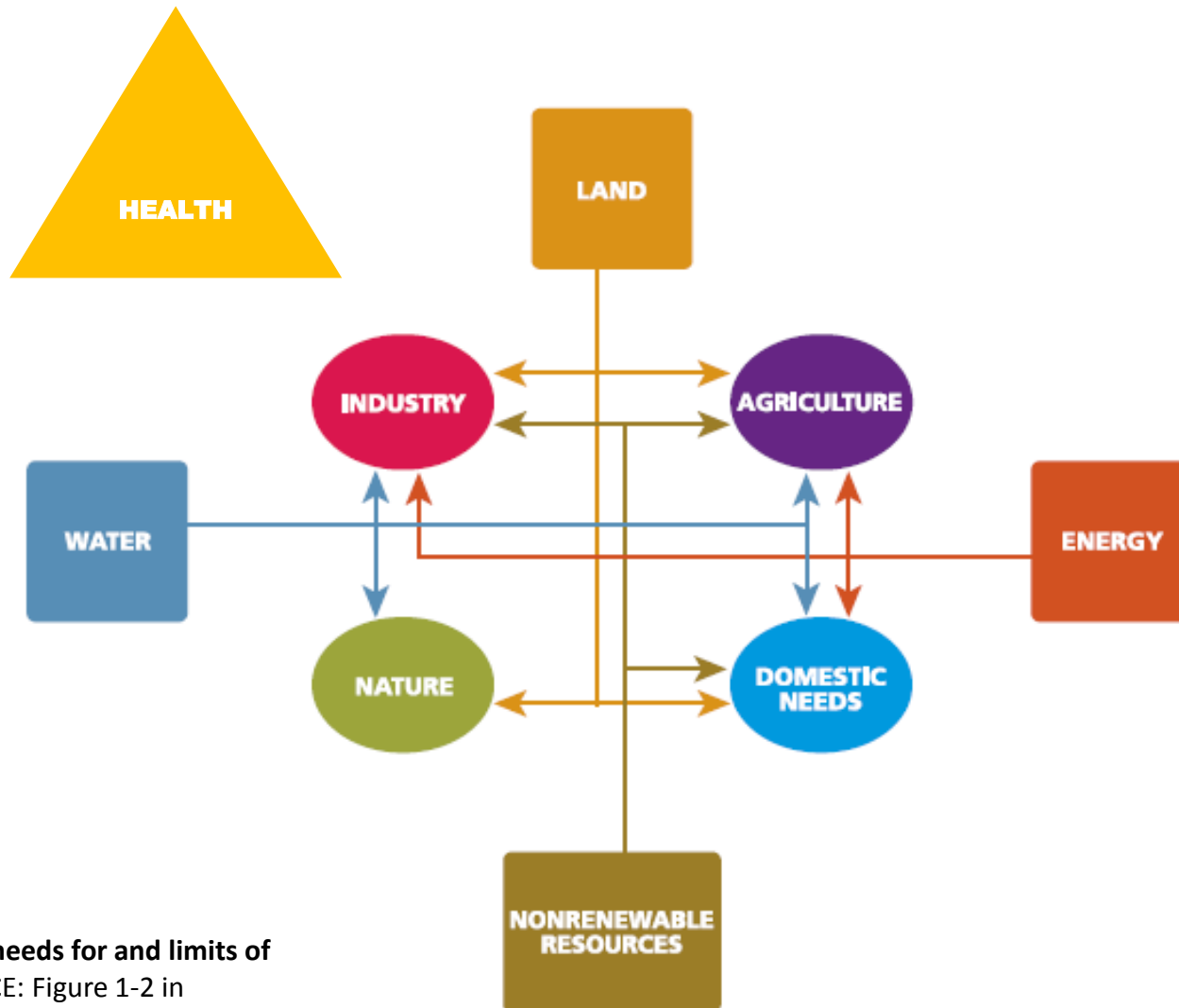# Linking Health Agencies and Organizations to Sustainability

- Barriers to linking health and sustainability

- Four small case studies

- Building links between health and sustainability: a focus on the Federal level

U.S. Department of Health and Human Services Organizational Chart

```
The Executive Secretariat              ┌──────────────────────┐     Office of Intergovernmental
                                       │      Secretary       │     and External Affairs (IEA)
Office of Health Reform                ├──────────────────────┤
(OHR)                                  │   Deputy Secretary   │
                                       ├──────────────────────┤
                                       │    Chief of Staff    │
                                       └──────────────────────┘
```

Left Offices	Center-Left Agencies	Center-Right Agencies	Right Offices
Office of the Assistant Secretary for Administration (ASA)	Administration for Children and Families (ACF) **$51.5B**	Centers for Medicare & Medicaid Services (CMS) **$853.5B**	Center for Faith-Based and Neighborhood Partnerships (CFBNP)
Program Support Center (PSC)	Administration for Community Living (ACL) **$1.8B**	Food and Drug Administration* (FDA) **$2.5B**	Office for Civil Rights (OCR)
Office of the Assistant Secretary for Financial Resources (ASFR)	Agency for Healthcare Research and Quality (AHRQ)* **$0.4B**	Health Resources and Services Administration* (HRSA) **$0.9B**	Departmental Appeals Board (DAB)
Office of the Assistant Secretary for Health* (OASH)	Agency for Toxic Substances and Disease Registry* (ATSDR) **$76M**	Indian Health Service* (IHS) **$0.5B**	Office of the General Counsel (OGC)
Office of the Assistant Secretary for Legislation (ASL)	Centers for Disease Control and Prevention* (CDC) **$6.2B**	National Institutes of Health* (NIH) **$31.3B**	Office of Global Affairs* (OGA)
Office of the Assistant Secretary for Planning and Evaluation (ASPE)	Substance Abuse & Mental Health Services Administration* (SAMHSA) **$3.4B**		Office of Inspector General (OIG)
Office of the Assistant Secretary for Preparedness and Response* (ASPR)			Office of Medicare Hearings and Appeals (OMHA)
Office of the Assistant Secretary for Public Affairs (ASPA)			Office of the National Coordinator for Health Information Technology (ONC)

* Designates a component of the U.S. Public Health Service.

Barriers to linking health and sustainability
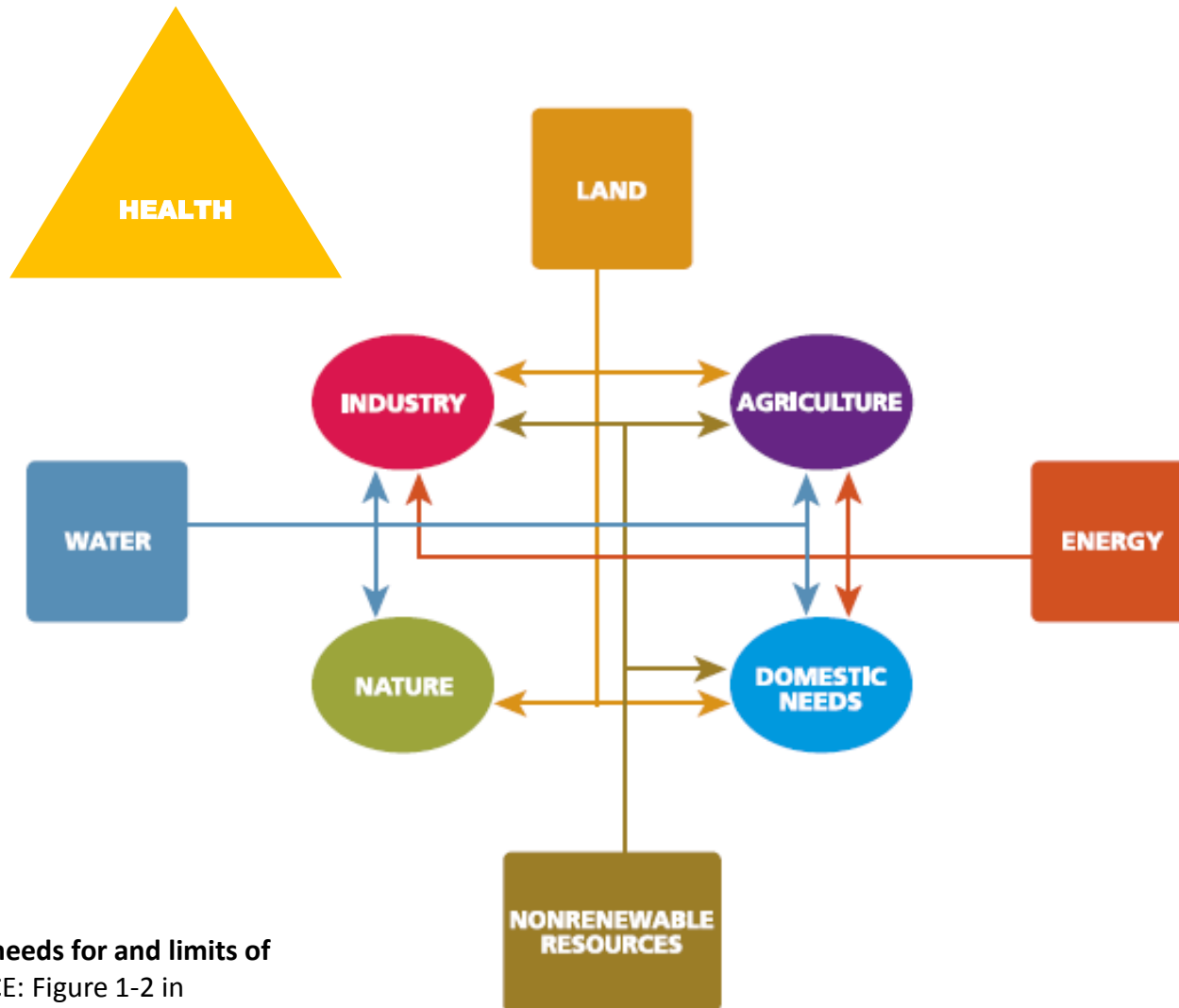
Conceptual barriers

The links among the needs for and limits of sustainability. SOURCE: Figure 1-2 in *Sustainability for the Nation*, adapted from Graedel & van der Voet, 2010.

HHS mission

"The mission of the Department of Health and Human Services is to help provide the building blocks that Americans need to live healthy, successful lives. We fulfill that mission every day by providing millions of children, families, and seniors with access to high-quality health care, by helping people find jobs and parents find affordable child care, by keeping the food on Americans' shelves safe and infectious diseases at bay, and by pushing the boundaries of how we diagnose and treat disease."

Human capital barriers

The links among the needs for and limits of sustainability. SOURCE: Figure 1-2 in *Sustainability for the Nation*, adapted from Graedel & van der Voet, 2010.

Organizational barriers

- Legal limitations (structural or vertical fragmentation of authority)
- Funding mechanisms that favor short-term, single-agency initiatives
- Lack of access to or coordination of such foundational elements as research and information/data
- Culture of government
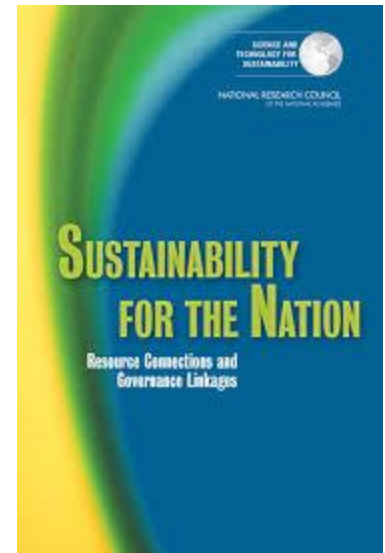
Leadership barriers
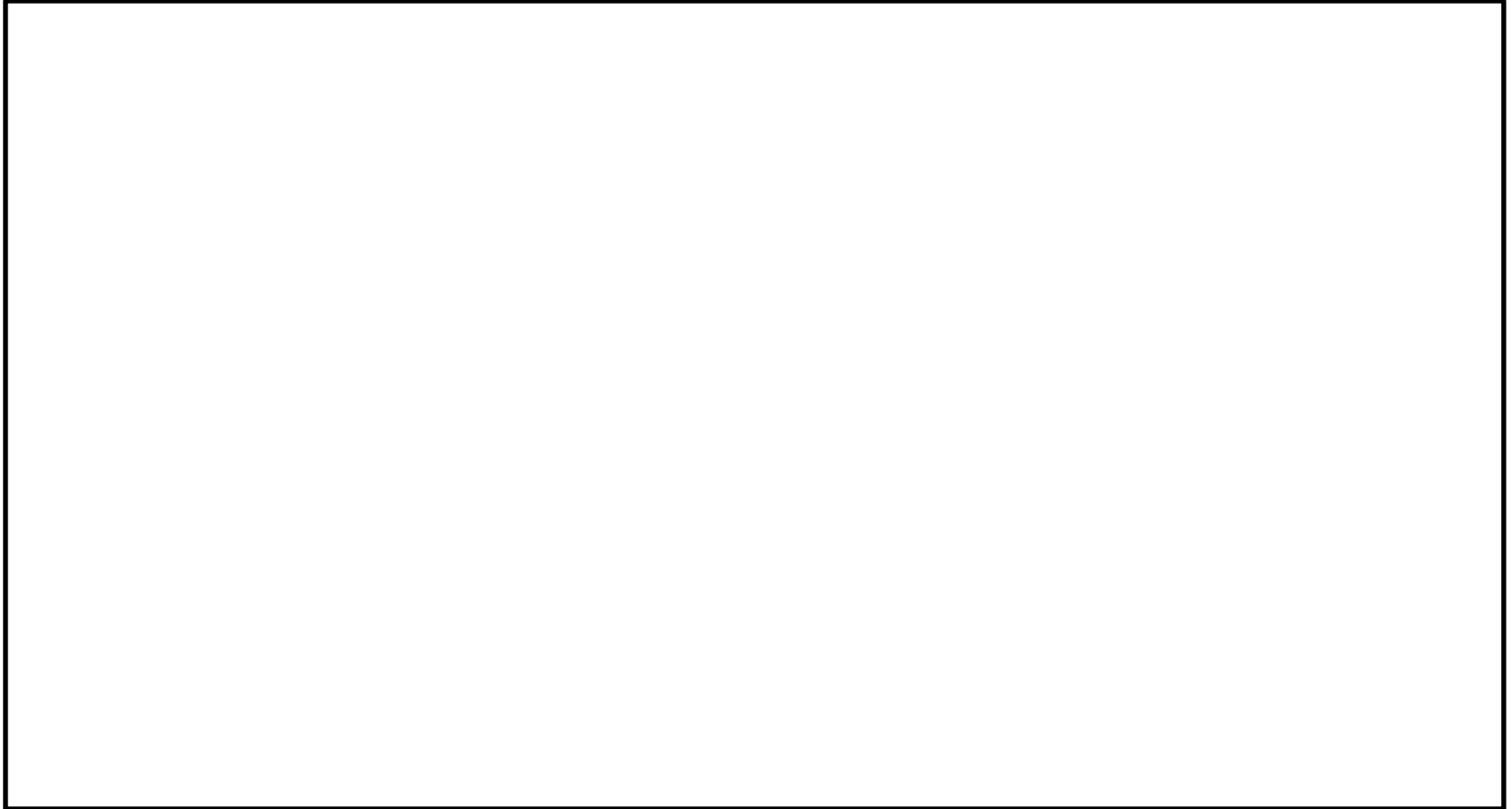
Bandwidth barriers
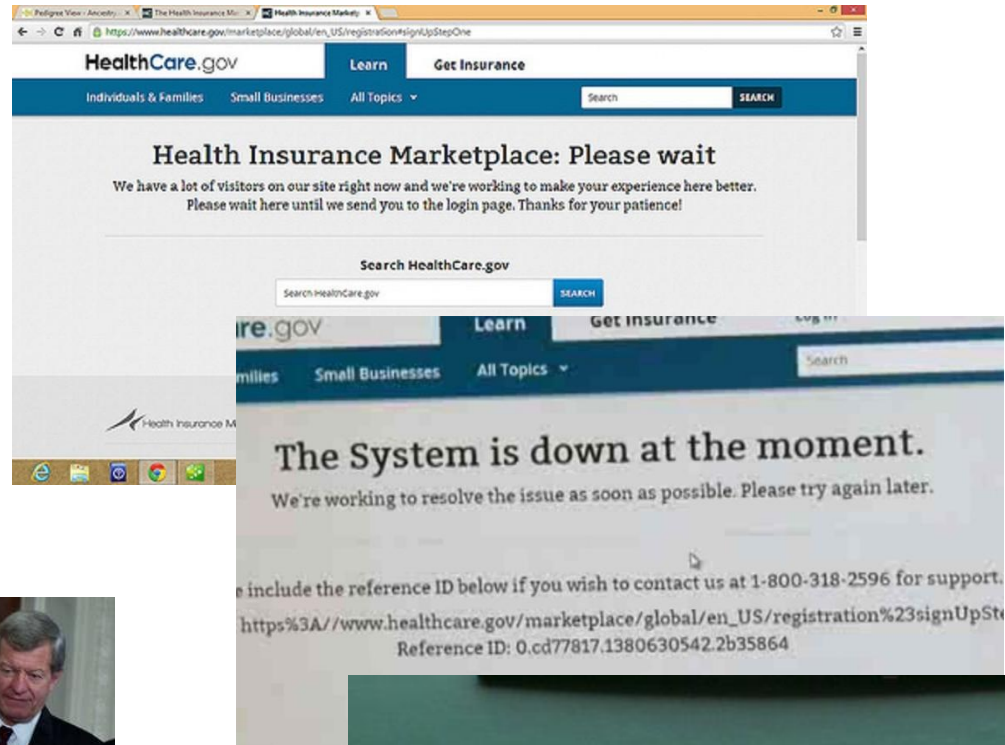
Four small case studies

- The Partnership for Sustainable Communities
- CDC's *Sustainable Planning Guide for Healthy Communities*
- Oceans and Human Health
- Local sustainability efforts

Google Search ▶

The Location Affordability Portal Launches

In November, DOT and HUD announced the launch of the Location Affordability Portal, a cost calculation tool that allows users to estimate housing and transportation costs for neighborhoods across the country. The LAP will help consumers and communities better understand the combined costs of housing and transportation associated with living in a specific region, street, or neighborhood and make better-informed decisions about where to live, work, and invest.

Check out the portal HERE.

⏸ 1 2 3 4 5 ◀ ▶

By working together, [HUD, DOT, and EPA] can make sure that when it comes to development—housing, transportation, energy efficiency—these things aren't mutually exclusive; they go hand in hand. And that means making sure that affordable housing exists in close proximity to jobs and transportation. That means encouraging shorter travel times and lower travel costs. It means safer, greener, more livable communities.
--President Barack Obama

Sustainable Communities

With help from the Partnership for Sustai⟨

Partnership for Sustainable Communities

- Started 2009
- HUD, DoT, EPA (but not HHS)
- Livability Principles
  - Provide more transportation choices.
  - Promote equitable, affordable housing.
  - Enhance economic competitiveness.
  - Support existing communities.
  - Coordinate and leverage federal policies and investment.

Sustainable Communities HotReport

Welcome to the Sustainable Communities HotReport! The HotReport is designed to give community leaders and residents a quick and easy way to determine how well your community is performing on a variety of sustainability indicators. The HotReport includes indicators for the following topics:

- Transportation

- Housing

- Economic development

- Income and

- Equity

What You Can Do With HotReport

Get Started Now

To view how your community compares to the state and U.S. on selected sustainability indicators, select a state and county:

Washington

King County, Washington

Sustainability Indicator	King County, Washington	Washington	United States
Transportation			
Commute mode share percentage (non-single-occupant vehicle)	17.9%	11.1%	9.5%
Mean travel time to work (Minutes)	27	26	25
Housing			
Percent of households with housing costs greater than 30% of income	39.3%	38.0%	36.1%
Equity			
Poverty rate	10.5%	12.5%	14.3%
Share of income held by top 5% of households	21.6%	20.4%	22.3%
Economic development			
Unemployment	6.9%	8.2%	8.6%
Share of population with a college degree	45.7%	31.4%	28.2%
Income			
Median household income	$70,567	$58,890	$52,762
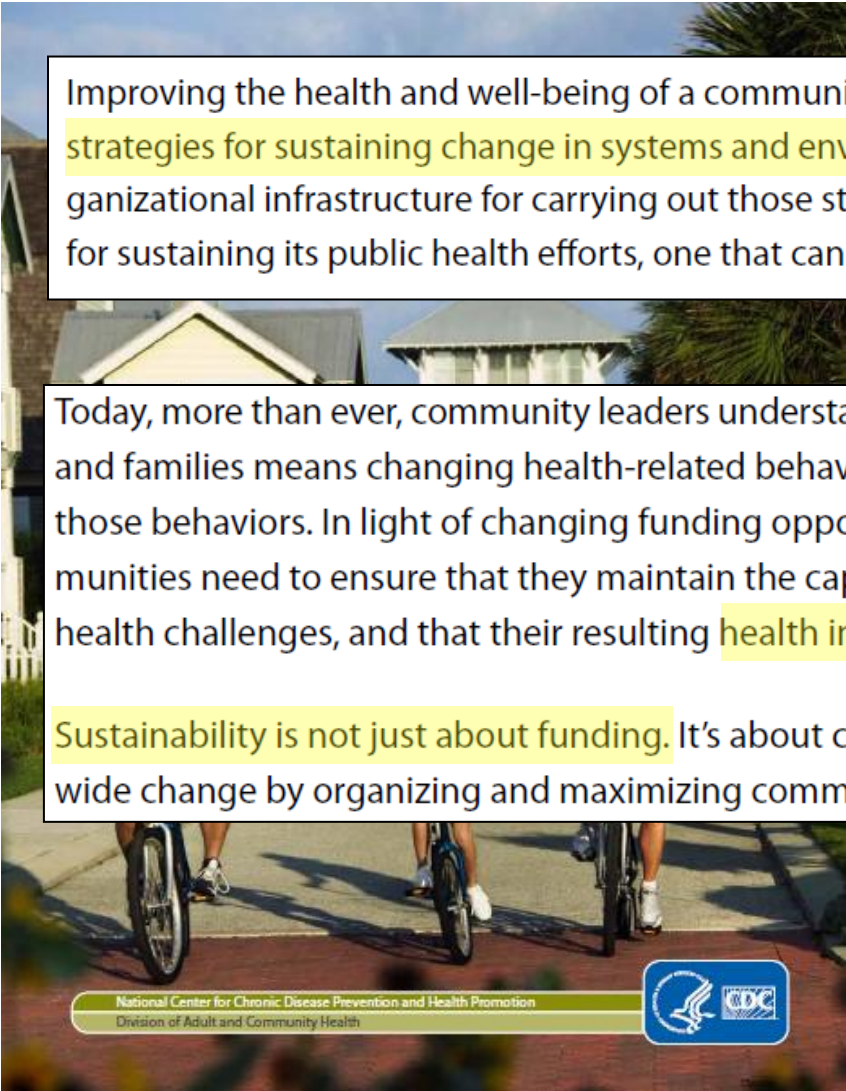
CDC's Healthy Communities Program

What is Sustainability?

The Guide's working definition of sustainability is: *A community's ongoing capacity and resolve to work together to establish, advance, and maintain effective strategies that continuously improve health and quality of life for all.*

Sustainable Communities: People and local organizations and agencies should be empowered to create attractive and economically thriving communities and neighborhoods. They need support to overcome challenging economic, social, and cultural barriers, such as community conflict, power inequalities, economic burden, and disparities. Sustainable communities should be:

- *Active, cohesive, and safe* with a strong local culture and shared community activities.
- *Well run* with effective and inclusive participation, representation, and leadership from a variety of community sectors.
- *Environmentally sensitive* in providing places for people to live.
- *Well designed,* featuring environments that provide opportunities for physical activity.
- *Well connected* via transportation and communication resources that link people to jobs, schools, healthcare, and other services.
- *Thriving* with a flourishing and diverse local economy.
- *Well served* with public, private, community, and voluntary services that are appropriate to people's needs and accessible to all.
- *Fair for everyone,* including those in other communities, now and in the future.

Improving the health and well-being of a community is no simple task for a coalition. It takes long-term policy strategies for sustaining change in systems and environments. And it takes the necessary community and organizational infrastructure for carrying out those strategies. In short, a coalition needs a comprehensive plan for sustaining its public health efforts, one that can help it manage internal and external challenges.

Today, more than ever, community leaders understand that improving the health and well-being of individuals and families means changing health-related behaviors—and that means addressing factors that influence those behaviors. In light of changing funding opportunities and increased competition for resources, communities need to ensure that they maintain the capacity to work in partnership to identify and address public health challenges, and that their resulting health initiatives can have lasting—that is, *sustainable*—impact.

Sustainability is not just about funding. It's about creating and building momentum to maintain community-wide change by organizing and maximizing community assets and resources. It means institutionalizing poli-

NATIONAL OCEANIC AND
ATMOSPHERIC ADMINISTRATION
UNITED STATES DEPARTMENT OF COMMERCE

NOAA

Oceans and Human Health Initiative

OCEANS & HUMAN HEALTH INITIATIVE

A Healthy Ocean for Healthy People

HOME | ABOUT OHHI | CENTERS | GRANTS | SCHOLARS | TRAINEESHIPS | PRODUCTS AND DATA | SENSORS

Learning from Sentinel Species and Habitats Video

|◀◀ ◀◀ ❚❚ ▶▶ ▶▶|

OHHI MISSION

To improve the understanding and managment of the ocean, coasts and Great Lakes to enhance benefits to human health and reduce public health risks.

Oceans & Human Health Initiative

- 1998: *From Monsoons to Microbes* (NRC)
- 2000-01: NSF and NIEHS collaboration (UW, Miami, Woods Hole, Hawaii)
- 2004: Oceans and Human Health Act, NOAA begins programs (Seattle, Charleston, Ann Arbor)
- Multiple products and activities
  - Health-related forecasts, advisories, and bulletins
  - Integrated tools for monitoring, modeling, and detection
  - Intramural and extramural research
  - Training

Sustainable DC

- **Jobs and the economy:** Triple the number of small businesses operating in the city, and create five times as many jobs providing green goods and services.
- **Health and wellness:** Cut the city's obesity rate in half, and require new housing to meet health standards.
- **Equity and diversity:** Teach DC kids about sustainability and extend Sustainable DC events and initiatives to all city neighborhoods.
- **Climate and environment:** Reduce greenhouse gas emissions in half, and make the city more resilient to the impacts of climate change.
- **Built environment:** Require new construction and existing large buildings to generate as much energy as they consume; work to place amenities within a 20-minute walk of homes; accommodate 250,000 new residents.
- **Nature:** Double the city's inventory of wetlands, increase tree canopy, and place parks or natural space within a ten-minute walk of all residents.
- **Transportation:** Reduce commuting by car and increase commuting by transit, walking, and bicycling; eliminate days of unhealthy air quality, now primarily caused by driving.
- **Water:** Use 75 percent of the city's landscape to capture rainwater for filtration or reuse, and make all city waterways compliant with clean water standards.
- **Energy:** Cut citywide energy use by 50 percent, and increase the use of renewables.
- **Food:** Address food deserts by ensuring that at least 75 percent of the city's residents are within a quarter mile of healthy, local food; devote 20 additional DC acres to food growing, and increase the city's consumption of local food to at least 25% of the total.
- **Waste:** Reduce waste generation and eliminate the need to dispose of solid waste in landfills.

THE DISTRICT OF COLUMBIA
"One City, One Future"

Mayor
VINCENT C. GRAY

Executive Office of the Mayor

Search [ ] Search
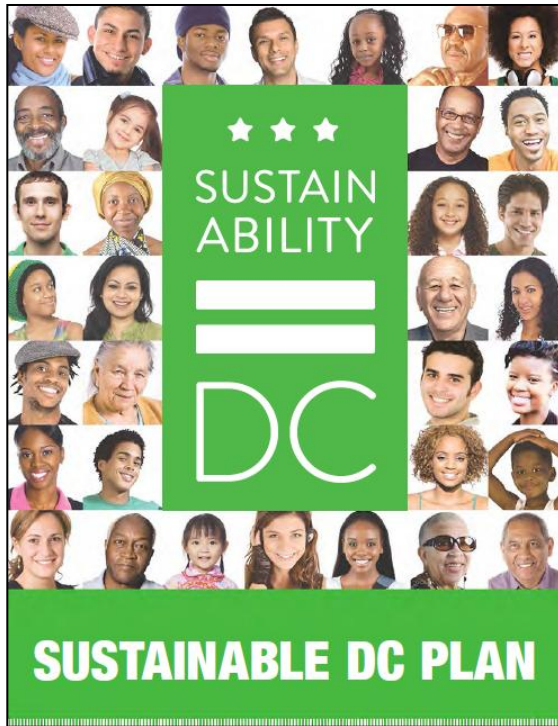
○ dc.gov ⦿ mayor.dc.gov

| Mayor Home | About the Mayor | Mayor's Priorities | Public Schedule | Connect With the Mayor | Government Services | Media |

Executive Office of the Mayor

ONE CITY

Office Hours
Monday to Friday, 9 am to 6 pm

Connect With Us
1350 Pennsylva
Suite 316, W
Phone: (2
Fax: (20
TTY: 7
Email:

Ask the Mayo

Vincent C. Gray
Mayor

🔊 Listen

➕ ADD THIS 🔲 💠 💠 ... Text Resize ⁺A ⁻A

Wednesday, November 6, 2013

Mayor Gray Announces Multiple Initiatives to Continue Implementation of Sustainable DC Initiative

Efforts will combat asthma and other health threats with sustainable policies

(Washington, DC) Mayor Vincent C. Gray today announced several initiatives – including submitting a new ~~the DC Council – that he is~~

...own Hall Education Recreation Arts Campus (THE... ...presentatives of Children's National Medical Center, the Mayor announce... ...ubmission of the Sustainable DC Act of 2013 to the Council, his signing of a new Sustainable DC Transformation Order, and funding for special projects across multiple agencies to improve health through cleaner air and water and healthier buildings.

...ur message today is clear — sustainability is health — and our Sustainable DC ...reating the healthiest, greenest, and most livable city in the nation ...ayor Gray. "District residents from Southern A...

The Omnibus Sustainable DC Act, which includes 11 bills, will move the District further toward achieving the goals of the Sustainable DC Plan: growing jobs and the economy, improving health and wellness, ensuring equity and diversity, and protecting our climate and the environment.

Mayor's E-Newsletter

Mayor's Newsletter

Sign up for Mayor Gray's e-newsletter

...llery
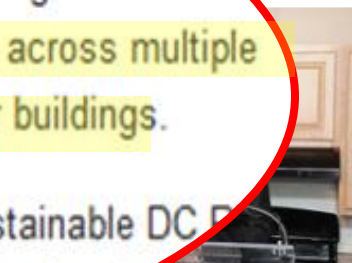
...e latest photos

Portland
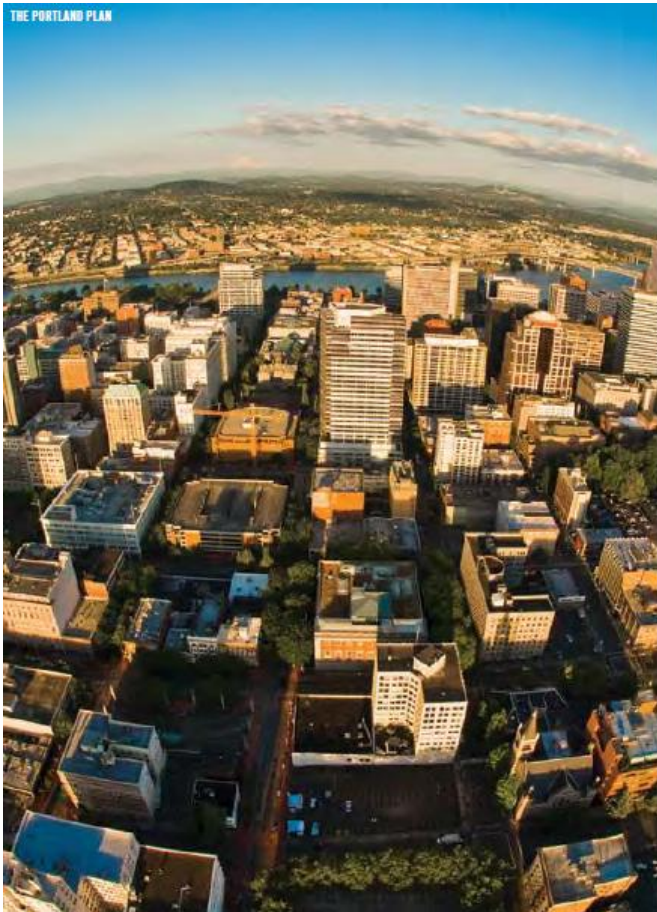
12 CITYWIDE MEASURES

1. Equity and inclusion
2. Resident satisfaction
3. Educated youth
4. Prosperous households
5. Growing business
6. Job growth
7. Transit and active transportation
8. Reduced carbon emissions
9. Complete neighborhoods
10. Healthier people
11. Safer city
12. Healthy watersheds

Sustainable Chicago 2015

Sustainability categories:
1. Economic Development and Job Creation
2. Energy Efficiency and Clean Energy
3. Transportation Options
4. Water and Wastewater
5. Parks, Open Space, and Healthy Food
6. Waste and Recycling
7. Climate Change

HEALTH IS EMBEDDED

2015 SUSTAINABLE CHICAGO
ACTION AGENDA

*"A sustainable Chicago is a city that spends less on energy use with each passing year, creates good-paying jobs in up-and-coming industries, responsibly maintains and upgrades its infrastructure, **and ensures every Chicagoan has the opportunity to live a healthy and active lifestyle**."* -- Mayor Emanuel

Linking Health Agencies and Organizations to Sustainability: Observations

- The Partnership for Sustainable Communities
  - Health and health agencies MIA
- CDC's *Sustainable Planning Guide for Healthy Communities*
  - Unconventional sustainability framework
  - Siloing within the agency
- OHHI
  - Success is possible
  - Catalytic role for NAS, NGOs, academia
- Local sustainability efforts
  - Strong examples of cross-sectoral blending

Linking Health Agencies and Organizations to Sustainability

Potential roles for HHS (and others):

1. Sustainability in HHS operations
2. Greening the health care sector
3. Educating about sustainability and health
4. Research on sustainability and health
5. A mission that blends health and sustainability

1. Sustainability in HHS operations

3919

Federal Register

Vol. 72, No. 17

Friday, January 26, 2007

Presidential Documents

Title 3—

The President

Executive Order 13423 of January 24, 2007

Strengthening Federal Environmental, Energy, and Transpor-

52117

Federal Register

Vol. 74, No. 194

Thursday, October 8, 2009

Presidential Documents

Title3—

The President

Executive Order 13514 of October 5, 2009

Federal Leadership in Environmental, Energy, and Economic
Performance

U.S. Department of Health & Human Services

Search

○ This Site ○ All HHS Sites

| Home | About Us | HHS Secretary | News | Jobs | Grants/Funding | Families | Prevention | Diseases | Regulations | Preparedness |

Text Size: A **A** **A** 🖹 ✉ f 🐦 ➕ Share

U.S. Department of Health and Human Services Focusing On Sustainable and Responsible Development

U.S. Department of Health and Human Services (HHS) Sustainability and Climate Change Resilience Policy Statement

June 28, 2013

When President Obama signed Executive Order 13514 on October 5, 2009, he committed the Federal Government to take a leadership role in promoting sustainability and responding to the threats of climate change. Since then, the U.S. Department of Health and Human Services (HHS) has made real progress in reducing greenhouse gas emissions, conserving water and other key resources, and evaluating risks and vulnerabilities associated with climate change's short and long-term effects.

A number of scientific panels, including the U.S. Global Change

Internal, operational actions

2013
US Department of Health and Human Services

Strategic Sustainability Performance Plan

June 27, 2013

POC: Kristin Gillham, Director, Office of Enterprise Support Programs, HHS/OS/ASA/PSC/FLS
Contact Information: (202)619-3690, kristin.gillham@hhs.gov
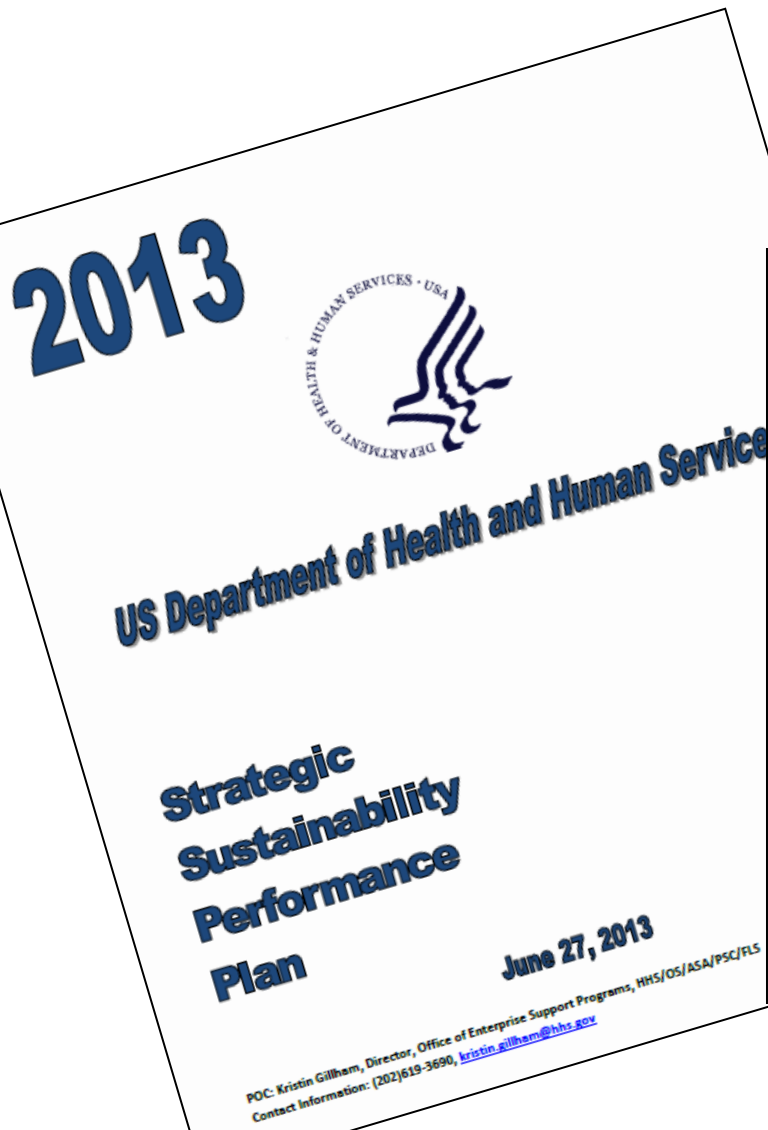
Summary of Agency Performance on Executive Order 13514 Goals ....

Goal 1 – Greenhouse Gas (GHG) Reduction...

Goal 2 – Sustainable Buildings ....

Goal 3 – Fleet Management ....

Goal 4 – Water Use Efficiency & Management....................................

Goal 5 – Pollution Prevention and Waste Reduction..........................

Goal 6 – Sustainable Acquisition...

Goal 7 – Electronic Stewardship and Data Centers.............................

Goal 8 – Renewable Energy ....

Goal 9 – Climate Change Resilience ....

2. Greening the health care sector

- Reducing energy use
- Reducing materials use
- Reducing toxics
- Reducing waste
- Sourcing local food; serving less meat
- Promoting active transportation and transit
- Resilient, climate-ready health facilities

Source: Energy Information Administration, 1995 Commercial Buildings Energy Consumption Survey.

"Green Health Care"

3. Educating about sustainability and health

- Providing information to the public (web sites, publications)

- Supporting training (models: IGERT; Oceans and Human Health)

- Developing and providing tools (e.g. CDC's "Building Resilience Against Climate Effects" [BRACE] framework; HIA)

4. Research on sustainability and health

5. A mission that blends health and sustainability

- Buildings
- Transportation
- Urban design
- Nature

- Materials
- Energy
- Agriculture
- Preparedness
- Data

Steps to linking health agencies and organizations to sustainability

- National Sustainability Policy
- Leadership commitment
- Funding priorities within HHS
- Co-funding (NIH and CDC with others)
- Local implementation
- Experimental, innovative arrangements (e.g. cross-staffing)
- Integration with community services, community development: emphasis on equity
- Partnerships with foundations, NGOs, private sector

Thank you!