

# Health Impact Assessment: Leveraging Opportunities to Improve Population Health and Improve Health Equity

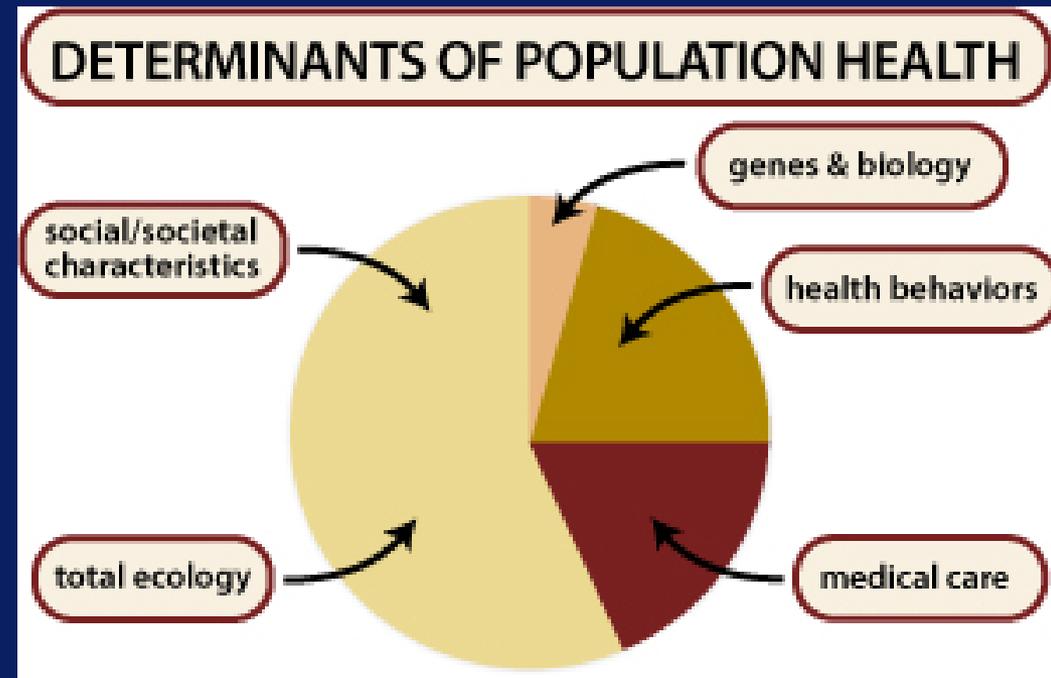
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# Determinants of Health

- This figure represents estimates of the contributions each determinant has on the health of a population
- Precise contributions are not currently known to scientists



Source: Centers for Disease Control & Prevention. Accessed at [www.cdc.gov/socialdeterminants/FAQ.html](http://www.cdc.gov/socialdeterminants/FAQ.html)



# What are health effects of decisions in other sectors?

- Most major determinants are in sectors other than health care
- Decisions in these sectors greatly influence our collective health
  - Positive
  - Negative
  - Net
  - Distribution among sub-groups



# Health Impact Assessment (HIA)

A systematic process that uses an array of data sources and analytic methods and considers input from stakeholders to determine the potential effects of a proposed policy, plan, program, or project on the health of a population and the distribution of those effects within the population.



# Two HIA Flavors

## 1. Project oriented

- Primarily physical environment

## 2. Policy Oriented

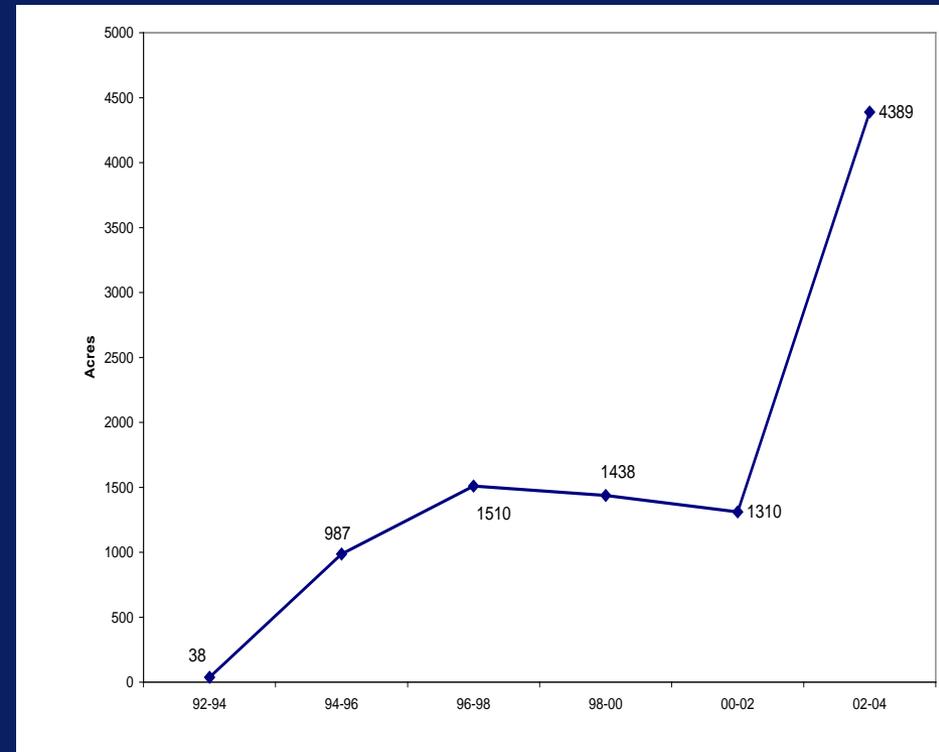
- Physical and social environment



# Project Oriented: Farmland Conversion



View NE of Bakersfield. From GoogleEarth, 2008



Acres of "important" farmland converted annually to urban/built up use Kern County, 1992-2004)



# Project Oriented: Access to Parks and Green Spaces



Above: From L.A. Dept of Parks and Recreation

Top: From Calif. Dept of Conservation, DOGGR  
Bottom: French Park, Santa Ana. Courtesy Latino Health Access



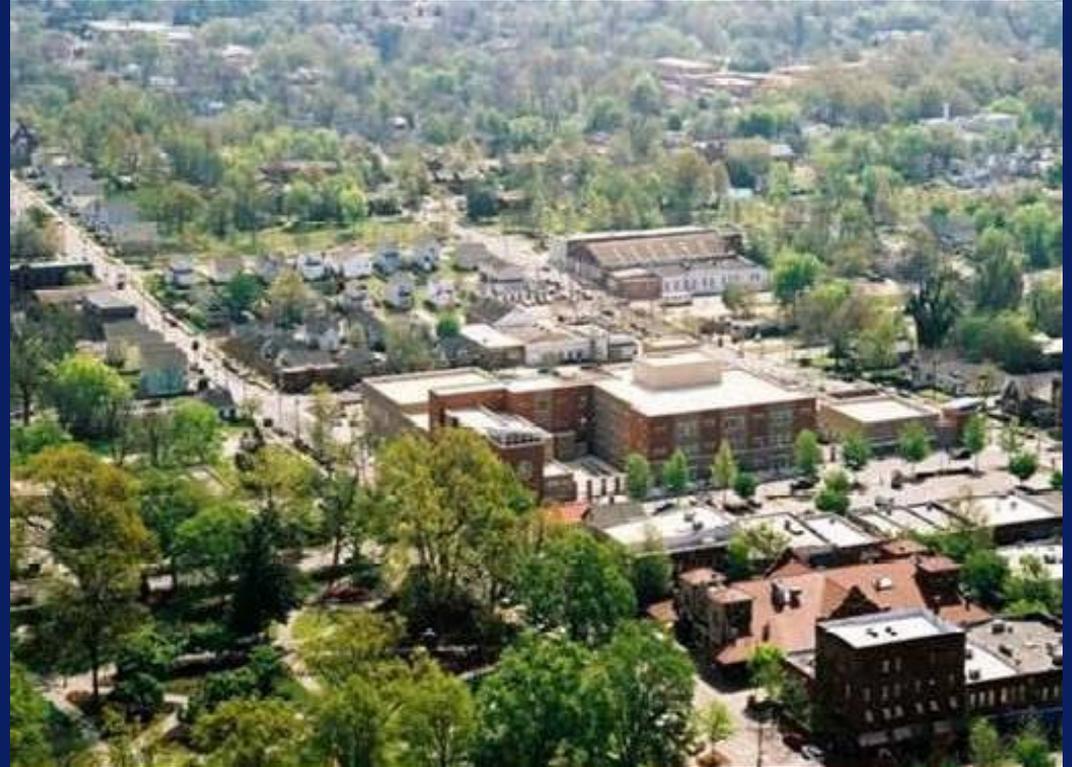
# Project Oriented: Joint Use Agreements



Photo courtesy of Latino Health Access (<http://www.latinohalthaccess.org>)



# Project Oriented: School Siting



Photos from U.S. EPA Smart Growth Office website



# Policy Oriented: Road Infrastructure and Land-use



Photo courtesy of the Kern County Dept. of Public Health



# Policy Oriented: Complete Streets



# Policy Oriented: Mass Transit Funding ...Or Not



Photo by North County Transit District (San Diego, CA)



Photo by Tatianes via Flickr



# Examples of HIAs

## Los Angeles County Department of Public and UCLA

- Fast Food Zoning
- Wilshire Subway and water conservation HIAs (in-process)
- Baldwin Hills EIR (which integrated HIA into the process)
- Mass Transit Health Impact Assessment

## UCLA

- LA City Living Wage
- Prop 49
- 2002 Federal Farm Bill
- Rapid HIA of injury liability protection
- State PE standards
- Trenton Farmers' Market



# HIA Benefits

- Influences decision makers using a broad understanding of health and a wide range of evidence
- Highlights potentially significant health impacts that are unknown, under-recognized, or unexpected
- Facilitates inter-sectoral working and public participation in decision making
- Assesses how proposals, policies, plans will affect all members of the community, particularly the most vulnerable
- Supports sustainable development—considers short and long term impacts
- Places public health on the agenda



# HIA Capabilities for State and Local Public Health Departments

- Strong partnerships with other agencies and organizations
- Epidemiology
- Planning
- Policy analysis
- Economics
- Community organization
- Modeling
- Public Education

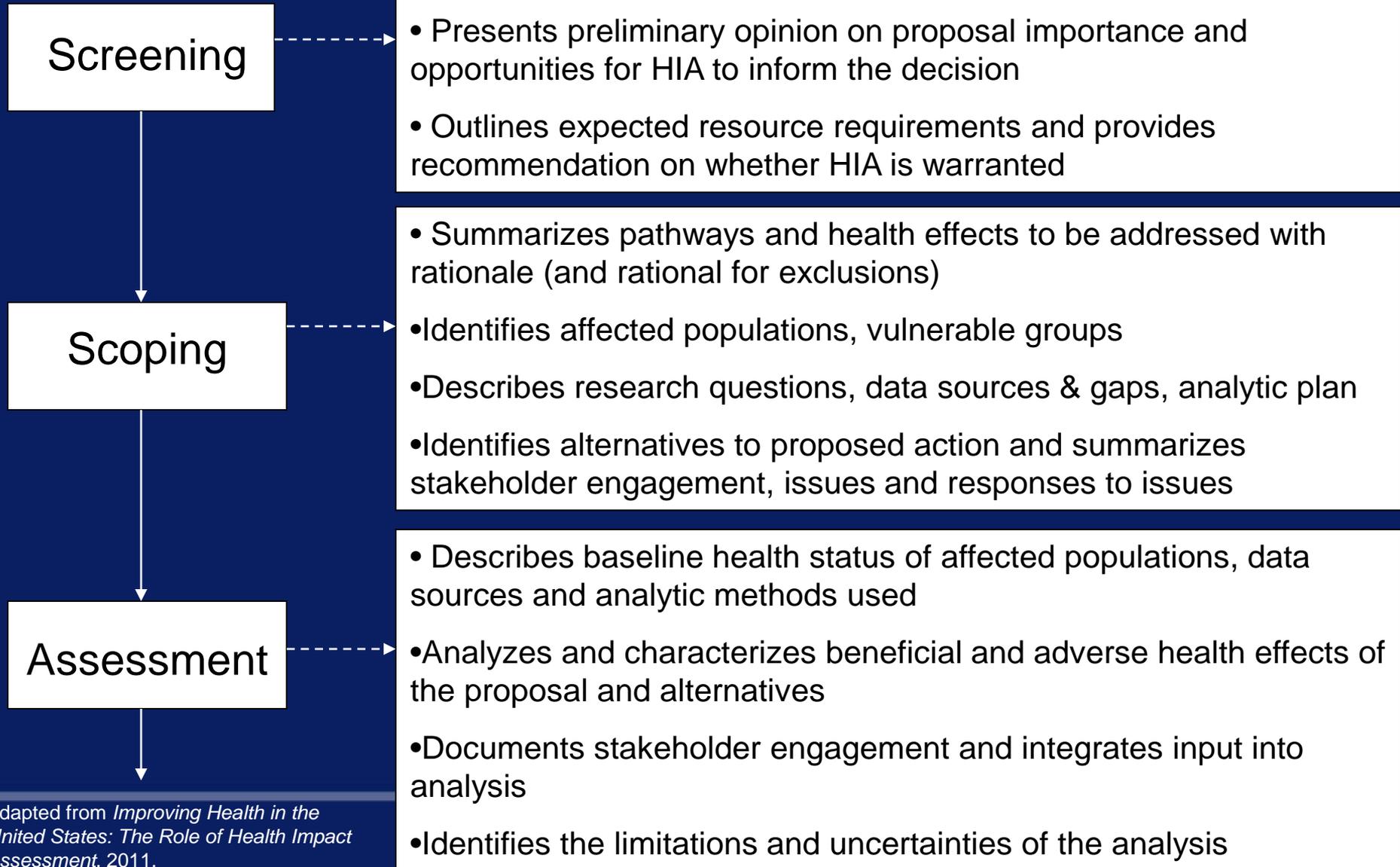


# How HIA can affect policy-making

- **Tip the scales** (adding evidence in favor or against a certain course of action);
- **Put new issues on the table** (raising awareness of un-/under-recognized health effects);
- **Change the terms of debate** (encouraging open, transparent decision-making and consideration of best available evidence);
- **Tweak plans** (suggesting measures to modify implementation in ways that minimize potential harm and maximize potential benefits);
- **Bring new parties to the table** (giving voice to concerns of affected stakeholders who have difficulty making their concerns known);
- **Change institutional missions and responsibilities** (encouraging formulation of policies that anticipate potential health effects).



# HIA Framework: Steps and Outputs



# HIA Framework: Steps and Outputs (cont)

## Recommendations

- Identifies alternatives to proposal or actions to avoid, minimize, mitigate adverse effects and to optimize beneficial ones
- Proposes a health-management plan to identify stakeholders who could implement recommendations, indicators for monitoring, & systems for verification

## Reporting

- Provides clear documentation of the proposal analyzed, the population affected, stakeholder engagement, data sources and analytic methods used, findings and recommendations.
- Communicates findings and recommendations to decision-makers, the public, and other stakeholders in a form that can be integrated with other decision-making factors

## Monitoring & Evaluation

- Tracks changes in health indicators or implementation of HIA recommendations
- Evaluates: a) whether the HIA was conducted according to plan and applicable standards; b) whether the HIA influenced the decision-making process; and, c) when practicable, whether implementation of the proposal changed health indicators.



# What does a health impact assessment look like?

## An HIA could be:

- A comprehensive 200 page report
- A 2-page policy brief
- A “logic framework” and supporting discussion showing causal pathways;
- A checklist completed by an agency or policy-makers;
- A spreadsheet or “calculator” allowing users to estimate health impacts for different scenarios;
- A process for guided community engagement, resulting in testimony given to a policy-making body.



*Research literature and experts help specify pathways*

## HIA pathways on mass transit funding

1. Air and water pollution;
2. Household discretionary income;
3. Community economic conditions;
4. Physical activity;
5. Social capital and mental health;
6. Discretionary time;
7. Access to social and health services;
8. Land-use patterns.



# One Example of HIA in Practice



Reducing Sodium Consumption in the County of Los Angeles with Food Procurement Policy



# LA County - Background

## County of Los Angeles

- 5 Supervisors, complex governing infrastructure
- Over 101,000 employees
- 37 departments, many bigger than many municipalities and local jurisdictions in California
- Operate food service venues and contract with many food service vendors
- 87 regional and local parks, 344 miles trails, and 19 public golf courses (world's largest system)
- Several museums, libraries, theaters, and beaches also under purview of the County



# Setting the Stage for a Local Health Impact Analysis

- In 2009-10, strategies to reduce sodium consumption were examined
- Food procurement policies were most promising to reduce sodium intake among patrons at LAC venues
- Key informant interviews
  - County Departments that purchase, distribute and sell food
  - Public and private entities with food procurement policies
  - County food suppliers and vendors



# Settings Impacted by Food Procurement Policies

- Daycare facilities, schools
- Prisons, juvenile detention centers, probation camps
- Worksite cafeterias
- Distributive food programs (i.e. senior meals programs)
- Concession stands operated by the jurisdiction



# Health Impact Assessment

- Used qualitative input and data provided by County food service vendors
- Mathematic simulation:
  - Varying levels of reductions in the sodium content of foods served
  - Estimated potential impacts on the mean Systolic Blood Pressure (SBP) in the targeted patron groups



# Preliminary Study Findings

## Results

- Analysis predicted that adults eating at the targeted food service venues could consume 233 fewer mg of sodium each day.
- This corresponded to:
  - a decrease of approximately 0.71 mm Hg in SBP among adult hypertensives;
  - fewer cases of uncontrolled hypertension in the study population;
  - lower costs of treatment
- Preliminary finding: food procurement policy can have positive health impacts in Los Angeles County



# Barriers to Implementation



- Unique features of each food service setting
- Cost and availability of low-sodium foods
- Complexity of food service arrangements
- Difficulty of modifying existing contracts
- Lack of consumer demand for low-sodium foods
- Unaccustomed/undesirable taste of low-sodium foods
- Vendors preference for prepackaged items
- Lack of knowledge and experience in operationalizing sodium standards



# Common HIA Challenges



- Complexity of the built environment and health outcomes.
- Lack of reliable and valid indicators of built environment effects.
- Lack of research on complex causal pathways related to social and economic environment.
- Insufficient data on interventions to improve health status.

# HIA-CLIC: An on-line resource for HIA information



UCLA HEALTH IMPACT ASSESSMENT CLEARINGHOUSE  
**LEARNING & INFORMATION CENTER**

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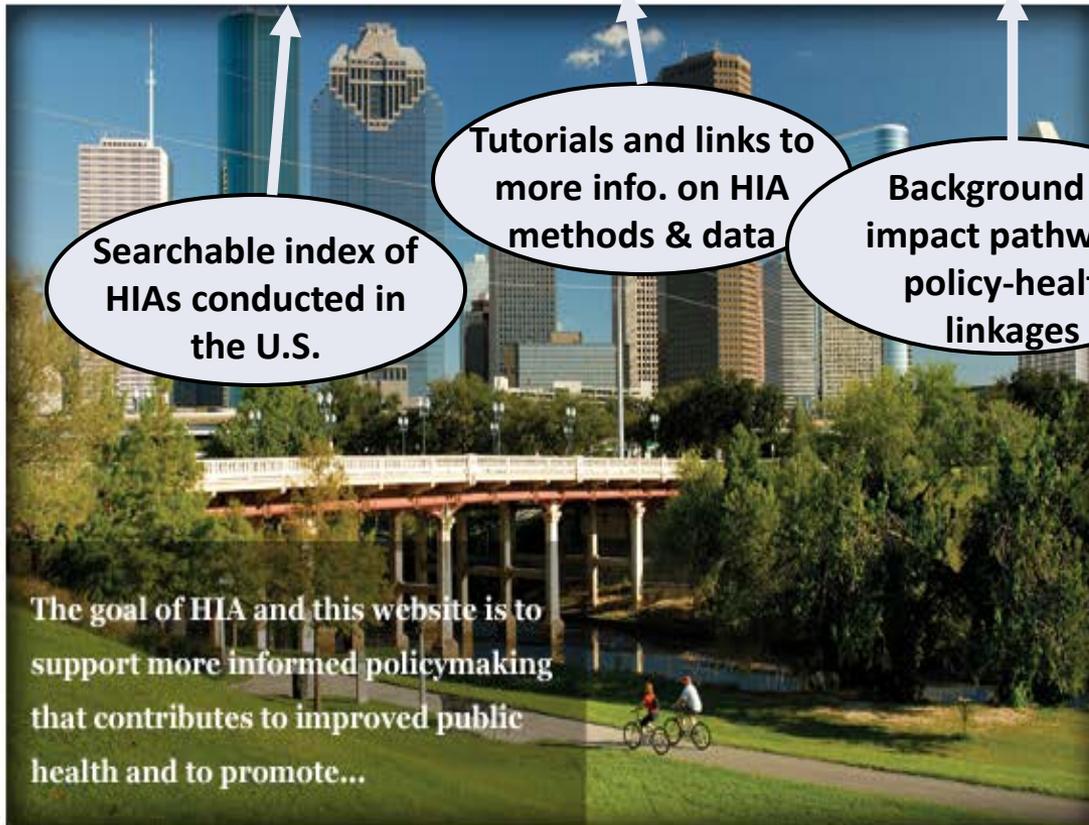
[Completed HIAs](#)

[Resources](#)

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Searchable index of HIAs conducted in the U.S.

Tutorials and links to more info. on HIA methods & data

Background on impact pathways, policy-health linkages

Training resources, HIA-related legislation



## HIA Spotlight

• Oak-to-Ninth Redevelopment in Oakland, CA (UC Berkeley) »

• Trenton, NJ Farmers Market »

• [More HIAs](#) »



## New to HIA CLIC?

Find out how to use the site with our [Quick Start Guide](#) »

[hiaguide.org](http://hiaguide.org)

# Thank you!

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## References:

Gase LN, Kuo T, Dunet DO, Simon PA. Facilitators and barriers to implementing a local policy to reduce sodium consumption in the County of Los Angeles government, California, 2009. *Prev Chronic Dis* 2011;8(2).

Gase LN, Kuo T, Dunet D, Schmidt SM, Simon P, Fielding JE. Estimating the potential health impact and costs of implementing a local policy for food procurement to reduce the consumption of sodium in the County of Los Angeles. *Am J Public Health* 2011;101:8:1501-1507.

HIA slides adapted from Brian L. Cole, Health Impact Assessment Group, UCLA School of Public Health

Sodium HIA: Data and support, courtesy of the Los Angeles County Sodium Reduction Initiative (LACSRI)

