Health Impact Assessment & Healthy Public Policy

Rajiv Bhatia, MD, MPH
San Francisco Department of Public Health
Department of Public Health Program on Health, Equity and Sustainability

- Inter-disciplinary program to advance health equity and environmental justice
- Engages with public institutions and private profit organizations working in diverse policy sectors
- Conducts research and applied analysis to increase the consideration of health in policy making
- Develops innovative public health policies and laws
Drivers for HIA: Social and Environmental Justice Challenges to Sustainable Development

- Will development protect and improve environmental quality for existing residents?
- Can development leverage needed infrastructure for health and well being?
- Will development result in displacement or facilitate social inclusion and integration?
- Will economic equity and health be included along with resource conservation in “sustainability?”
Distinguishing Features of Health Impact Assessment

- Application to environmental planning and social policy
- Focus on population health
  - Holistic definition of health
  - Consideration of social and environmental determinants
  - Concerns of vulnerable populations
- Systematic analytic process
  - Estimation of health benefits and harms
  - Best available evidence
  - Distributional analysis
  - Alternatives and mitigations
- Inclusion
  - Stakeholders engagement
  - Transparent process
HIAs Completed or In-Progress in San Francisco (1999 – 2011)

- Labor Policy (4)
- Land Use Plans (6)
- Housing Projects (6)
- Transport Plans and Policies (2)
- Local (15)
- State (2)
- National (1)
Health Benefits Analysis of the 1999 San Francisco Living Wage Law

- Quantified the Health and Social Benefits of a Living Wage
  - Life-expectancy, education, depression, sick leave
- Contributed to local support for living wage law
- Demonstrated public health could contribute to social and economic policy
- Led to health authority awareness of HIA
Developer proposed demolishing 360 rent-controlled apartments to build 1400 market rate condominiums

Planning: No adverse impacts on the population

Tenants: project would lead to stress, breaking social networks, budget strain, overcrowding

Health Department: Displacement = adverse health effects

City required 1:1 replacement or study of displacement impacts

Planning policy increased demolition protections for private housing
HIA of Transportation Policy
Road Pricing in San Francisco (Scope)

- **Decision:**
  - Proposed program to charge $3 during AM/PM rush hours to travel into or out of the congested northeast quadrant of San Francisco. Revenues would fund transport improvements.
  - Decision will be made by legislative body

- **Scope of Analysis:**
  - Active transportation & mortality
  - Particulate pollution & mortality
  - Traffic noise, stress and IHD
  - Pedestrian and cyclist injury
  - Equity in traffic density
  - Economic valuation
# HIA of Transportation Policy

## Road Pricing in San Francisco (Findings)

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2015 BAU: 2015 under "Business As Usual" - no road pricing; 2015 RP: 2015 with road pricing
Red: Increases in Negative Health Impacts
Green: Increases in Health Benefits
Black: Neutral/Flat Impacts
Outcomes of San Francisco’s Local HIA practice

- **Direct Outcomes**
  - Changes to policy and project design

- **Indirect Outcomes**
  - Public understanding of health determinants
  - New analytic capacity to understand impacts of health
  - Cooperation with planning, transportation, housing, and economic sectors
  - Integration of health analysis and health promotion into planning practices
  - Identification of policy and regulatory gaps
A Monitoring System for Population Health and Equity

The Healthy Development Measurement Tool

1) Framework of Community health objectives
2) Community-level Health Indicators
3) Policy and Design Strategies
4) Development Targets
5) Public Health Evidence
Local Scale PM 2.5 Modeling
Relative elementary school quality and accessibility
Quantitative forecasting of pedestrian injuries

Proportion of small-area differences in injuries explained by variation in the risk factor:

- 21% - Traffic volume
- 13% - Employee Population
- 10% - Neighborhood Commercial (NC) Zoning
- 10% - Arterial streets
- 9% - Resident Population
- 7% - Residential-NC zoning
- 7% - Land area
- 5% - Below poverty level
- 5% - Age 65 and over

Using pedestrian injury data to increase and focus countermeasures and enforcement
Developing New Public Health Regulations
Sensitive Use Protections for Traffic Pollution Hot Spots

- Aimed to prevent new traffic-related impacts
- Requires projects in areas with traffic conflicts to assess and mitigate exposures
- Proponent conducts air quality modeling for site
- Law establishes an PM 2.5 based action level for mitigation
- Mitigation via building design or engineered ventilation to remove 80% of outdoor PM 2.5
Integrating Health Performance Metrics
Bay Area Transportation Plan

- GHG reduction
- Adequate housing
- Healthy and Safe Communities
  - PM 2.5 attributable mortality
  - Transportation Injuries
  - Active transportation time
- Open Space preservation
- Household transportation costs
- Reduction of Travel times
- Economic vitality—GDP growth
- Transportation system maintenance
HIA impacts on political conditions that affect population health

✓ Public awareness of the determinants of health
✓ Monitoring of health and determinants
✓ Inter-institutional coordination and cooperation
✓ Health protective laws and regulations
✓ Organizational networks for advocacy and accountability
Factors contributing to success

- Found ways to provide value to both progressive change constituencies and public agencies
  - Fostered a constituency for practice
- Brought strong science and public health agency legitimacy positions
- Built durable technical capacity and agency relationships to deliver analysis
- Endeavored to integrate knowledge into existing city and agency planning practices
- Intent focused on the ends (population health) and not the means (HIA)
Some Next Steps for the Field of HIA

- Standards of practice and peer-review
- Publicly sanctioned screening and selection process
- Adequate resource commitments
- Development of methodological capacities
- Cross sector experience, understanding, and buy-in
- Application through existing laws, regulations, or other accountability mechanisms
Resources: The SF Bay HIA Collaborative

SF HIA Collaborative
www.hiacollaborative.org

SF Department of Public Health
www.sfphes.org

UC Berkeley HIA Group
http://sites.google.com/site/ucbhia

Human Impact Partners
www.humanimpact.org