

Health Impact Assessment & Healthy Public Policy



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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)

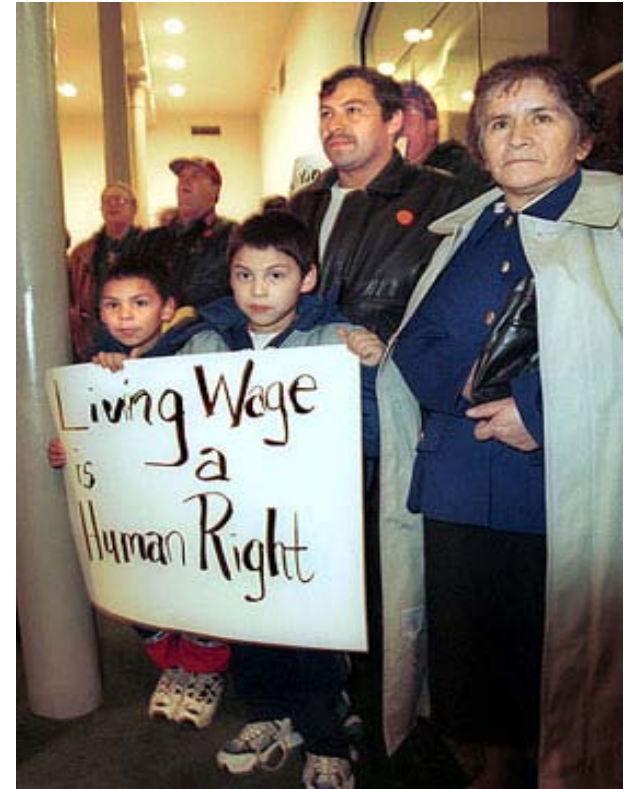


- Labor Policy (4)
 - Land Use Plans (6)
 - Housing Projects (6)
 - Transport Plans and Policies (2)
-

- 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



Preventing Residential Displacement with HIA

Trinity Plaza, San Francisco

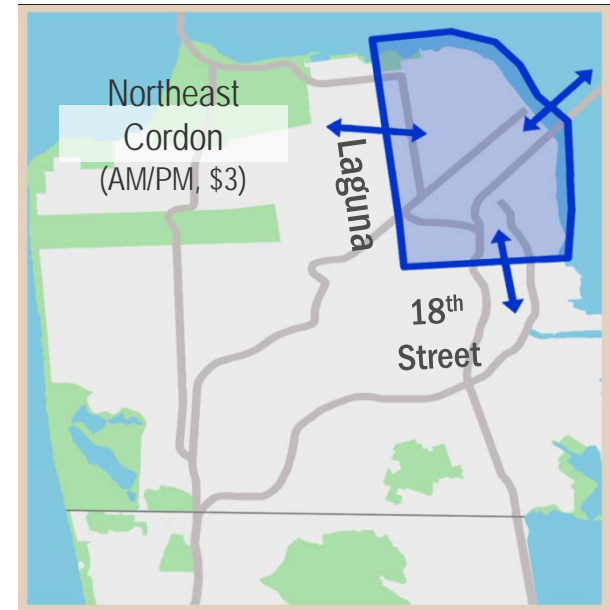
- Developer proposed demolishing 360 rent-controlled apartments to build 1400 market rate condominiums
- Planning: No adverse impacts on the population
- Tenants: project would lead to stress, breaking social networks, budget strain, overcrowding
- Health Department: Displacement = adverse health effects
- 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)

Health Impacts (Annual Estimates)	2005: Existing Conditions	Change: 2005 - 2015 BAU	Change: 2005 - 2015 RP	Change: 2015 BAU - 2015 RP	Confidence in Quantitative Estimate
Early Death From Air Pollution					<i>High - Moderate</i>
Citywide	65	2%	-3%	-5%	
Northeast Quadrant	24	8%	-4%	-12%	
Stress From Traffic Noise					<i>High</i>
Citywide	92,500	9%	8%	0%	
Northeast Quadrant	36,800	10%	10%	0%	
Heart Attacks From Traffic Noise					<i>Moderate</i>
Citywide	31	10%	10%	0%	
Northeast Quadrant	18	11%	11%	0%	
Pedestrians Injured by Motor Vehicles					<i>High - Moderate</i>
Citywide	810	6%	1%	-5%	
Northeast Quadrant	360	10%	0%	-9%	
Cyclists Injured by Motor Vehicles					<i>Moderate - Low</i>
Citywide	270	9%	7%	-2%	
Northeast Quadrant	135	15%	11%	-3%	
Cycling Benefits - Lives Saved					<i>Moderate</i>
Citywide	23	9%	13%	4%	
Northeast Quadrant	8	13%	13%	0%	
Walking Benefits - Lives Saved					<i>Moderate</i>
Citywide	130	6%	8%	2%	
Northeast Quadrant	69	10%	12%	1%	

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

Healthy Development Measurement Tool
A comprehensive evaluation metric to consider health needs in urban development

Home Introduction Tool Instructions The Tool Application Resources About ...

Recent News

2008-05-27 HDMT Website and Data Revision Complete
We recently completed an extensive update to HDMT website content, including to indicators and data, development targets and checklist, and neighborhood profiles. In addition, we added a "Tool Instructions" section to the website to better explain how the HDMT can be applied. Thank you for your patience as we completed this update.

2008-05-27 Draft Evaluation of Eastern Neighborhoods Area Plans Released
The public draft of our evaluation of the Eastern Neighborhood Area Plans using the HDMT is now available. [Click here](#) to download the report "[Impacts on Community Health of Area Plans for the Mission, East SoMa, and Potrero Hill / Showplace Square: An Application of the Healthy Development Measurement Tool](#)".
For additional HDMT updates and changes, please visit [News Archives/Corrections and Errors](#).

Get Started...

- Begin with an [introduction](#) or download a [helpful presentation](#) (PDF).
- **Use the Tool.**
- Look at [community indicators](#).
- Check out [SF neighborhood data](#).
- Access Tool [resources](#).

The Tool

The **Healthy Development Measurement Tool** is a comprehensive evaluation metric to consider health needs in urban development plans and projects. The HDMT explicitly connects public health to urban development planning in efforts to achieve a higher quality social and physical environment that advances health.

Who We Are

We're committed to assessing urban environmental conditions and responding to health inequities and environmental policy gaps using health impact assessment methods. We're the [San Francisco Department of Public Health, Program on Health, Equity and Sustainability](#).
Be sure to [contact us](#) with any questions or comments.

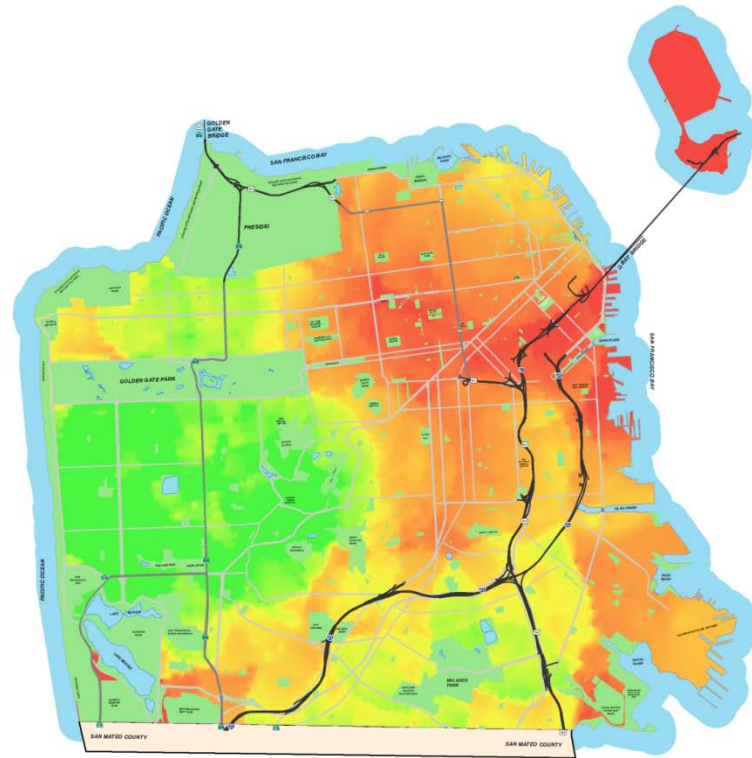
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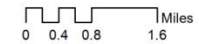
Local Scale PM 2.5 Modeling



Relative elementary school quality and accessibility



Elementary Education Access Score



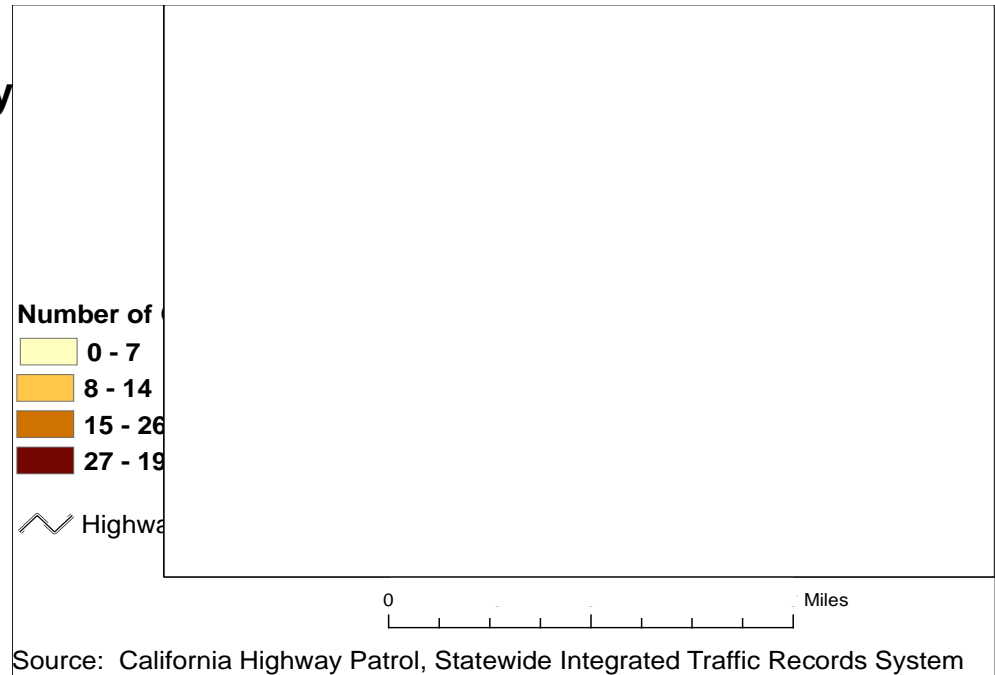
Source: California Department of Education,
2010; US Census 2010

City and County of San Francisco
Department of Public Health
Environmental Health Section

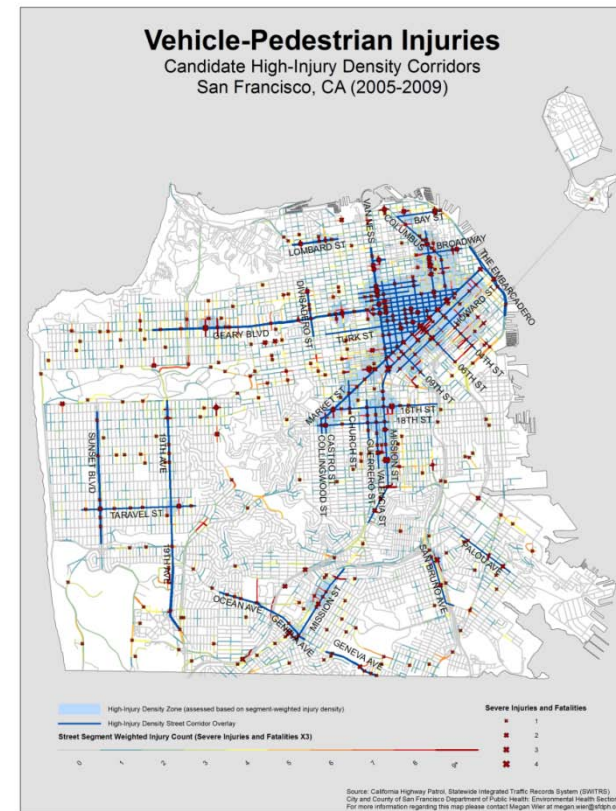
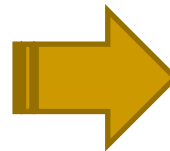
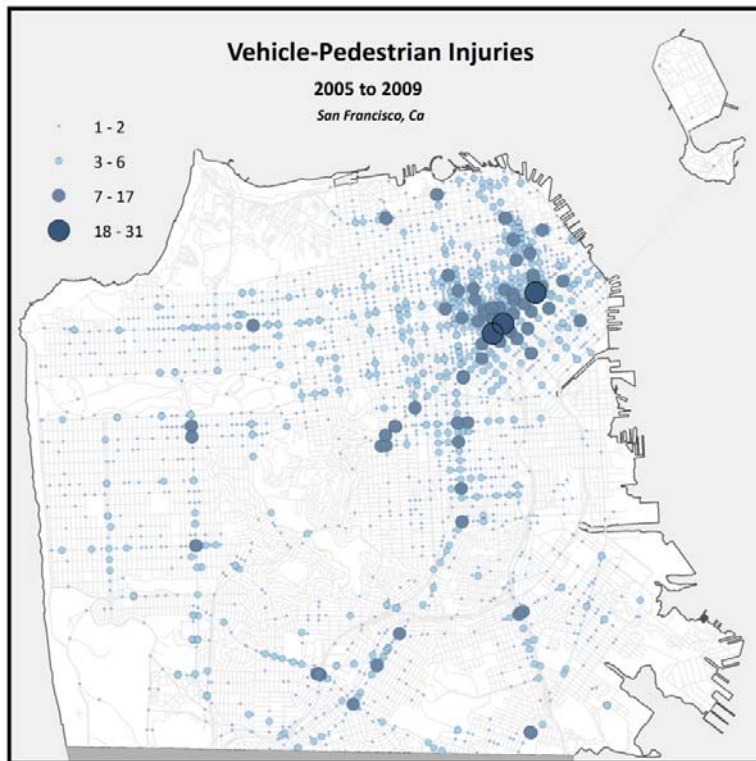
Quantitative forecasting of pedestrian injuries

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 (-)

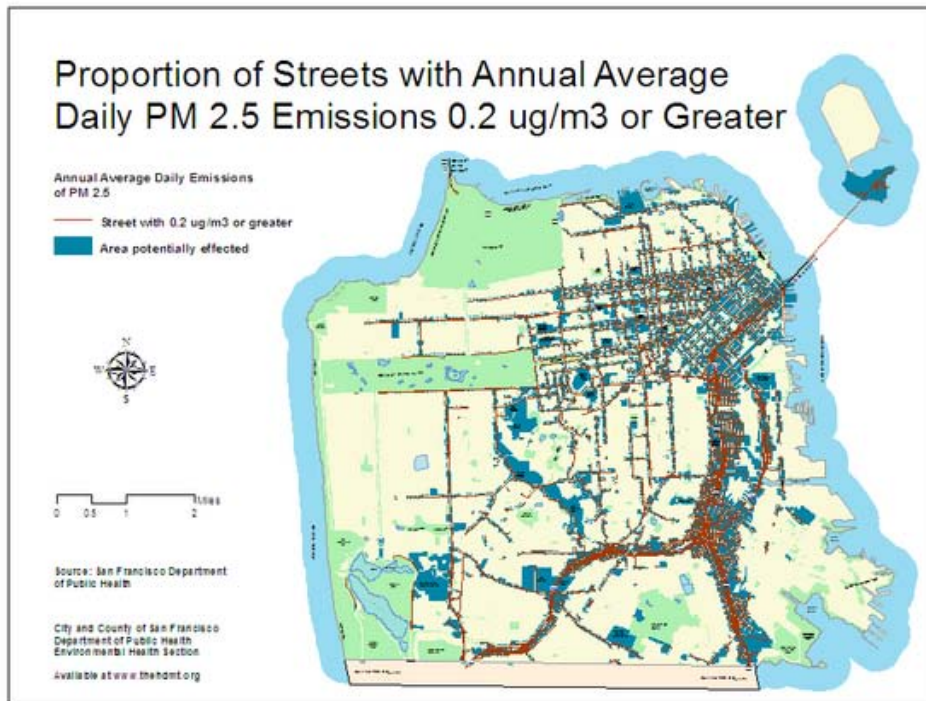


Using pedestrian injury data to increase and focus countermeasures and enforcement



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



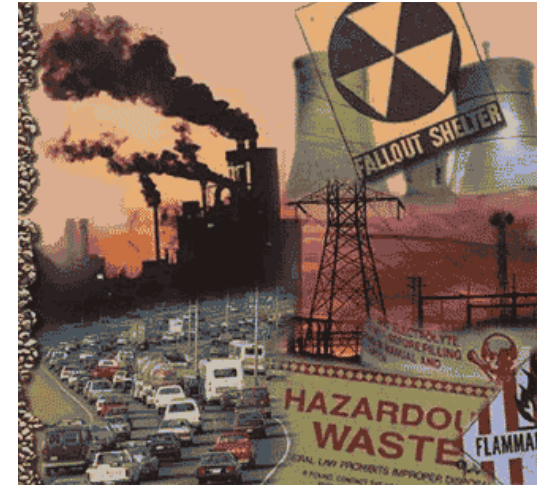
Factors contributing to success

- 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

San Francisco Bay Area
HEALTH IMPACT ASSESSMENT COLLABORATIVE

Search...

HOME ABOUT US CASE STUDIES TOOLS PARTNERSHIPS TRAINING + MENTORSHIP POLICY DISCUSSION BOARD

TRAINING + MENTORSHIP
We provide presentations, lectures, and workshops, as well as technical support and mentorship nationally.

TOOLS
Collaborative members have developed and applied a number of innovative evidence-based tools. Find them here.

DISCUSSION BOARD
Post and review questions on starting your own HIA, resource and capacity needs, influencing decisions and more.

FAQ
Find answers to all your HIA related questions including "What is HIA?" and "What does

Who We Are
We are a group of academic, government, and non-profit HIA practitioners who have joined together to be more effective in conducting HIA, engaging stakeholders in partnerships, providing training, and helping to develop policy. [MORE >](#)

Case Studies
National Paid Sick Days HIA Released - June 2009: Collaborative members are excited to release an HIA of a proposed national paid sick days law. [MORE >](#)

WHAT'S NEW

Minimum Elements and Practice Standards for HIA - Newly Released!
November 2010
The HIA of the Americas Practice Standards subgroup is excited to release an updated version of the "[Minimum Elements and Practice Standards for Health Impact Assessment \(HIA\)](#)." Minimum Elements answer the question of "what essential elements constitute an HIA" as distinct from Practice Standards, which answer the question, "how to best conduct an HIA." Overall, the hope is to translate the values underlying HIA along with key lessons from HIA practice into specific standards for practice for each phase of the HIA process.

Draft San Francisco Public Housing Redevelopment HIA Released
August 2010
The UC Berkeley Health Impact Group is excited to release a public draft of a retrospective HIA of redevelopment of two public housing sites through the federal HOPE VI program. The HIA asked the

SF HIA Collaborative
www.hiacollaborative.org

SF Department of Public Health
www.sfpbes.org

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

Human Impact Partners
www.humanimpact.org

