# Built Environment and Health

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#### Overview

- Introduction: how the built environment influences health
- Defining "health"
- Health impact assessment
- Other ways to incorporate health into planning



Health is a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity.

World Health Organization



- Physical well-being
  - At a minimum includes absence of chronic disease, infectious disease, injury etc.
  - Ability to engage in physical activity, activities of daily living, work, leisure etc.



Mental well-being

- "Every individual realizes his or her own potential, can cope with the normal stresses of life, can work productively and fruitfully, and is able to make a contribution to her or his community". (WHO)
- Absence of (or effective accommodation/ treatment for) significant behavioral health problems (depression, substance abuse, etc.)



- Social well-being
  - Community connection, social cohesion
  - Decreased risk of social isolation



University of Wisconsin, Population Health Institute



# Making the healthier choice



- How do we know if our urban planning choices:
  - Will make us a healthier community? How much healthier?
  - Distribute benefits and burdens equitably?
  - Will have adverse consequences? How can we mitigate?

# Making the healthier choice



 Examining health and equity impacts in urban planning along a continuum:

Health impact assessment

Routine consideration of health in planning cycles

- e.g.: CRC, Sellwood Bridge
- Specific to a given project/policy

- e.g.: regional transportation plans, comprehensive plans etc.
- Applies to all policies, programs, projects covered by plan

#### **Health Impact Assessment**



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

(emphasis added)

World Health Organization, 1999



- SCREENING determine whether HIA would be useful for a given project or policy
  - Potential subjects of an HIA: changes to laws/regulations, building major roadway, budget decisions, planning for a city's growth, developing a school curriculum
- 2. **SCOPING** identify which health effects to consider; may include the most severe problems, most concerning to citizens etc.
  - Consider the depth of assessment, resources to be applied



- 3. **ASSESSMENT** identify which populations may be affected and the nature, magnitude, severity, and likelihood of health effects,
  - Scientific data, health and planning expertise, public input



- 4. **RECOMMENDATION** suggest changes to proposals to promote positive or mitigate adverse health effects,
  - e.g. Sellwood Bridge HIA recommendations:
    - bike/pedestrian path design recommendations to minimize injuries from collisions;
    - Use of clean diesel practices during construction to minimize adverse health effects from exposure to air pollution



- 5. **REPORTING** present the results to decisionmakers, and
- 6. EVALUATION determine the effect of the HIA on the decision.

### **Examples of HIAs nationwide**



- Transportation Project examining health effects of light rail on low-income and immigrant communities.
  Minneapolis/St. Paul
- Agricultural Development maximizing job creation and improvements in local diet through county plan for agricultural land use. *Hawaii*
- **Fiscal Policy** weighing the relative health impacts of several options to trim the state budget. *New Hampshire*



# **Examples of HIAs in Oregon**

- Columbia River Crossing HIA
  - Multnomah County Health Department

#### Sellwood Bridge HIA

- Multnomah County Health Department
- Lake Oswego to Portland Transit Project
  - Oregon Public Health Institute
- Policies Reducing Vehicle Miles Traveled in Oregon Metropolitan Areas
  - Upstream Public Health

#### **HIA: resources needed**

- Scale: desktop to comprehensive HIA
- Time commitment: 2 weeks to 1 year
- Financial commitment: \$10K to \$200K



# **HIA challenges**



- Who undertakes this? (public health department? urban planning? advocacy?)
- Lack of local data and small-area models
- Collaboration between sectors
- Difference in language/jargon in planning and public health
- Decision making timelines requiring quick turn around
- Funding

#### **HIA and EIA compared**



- Environmental Impact Assessment (EIA)– required by National Environmental Policy Act (NEPA) for projects requiring federal funding or action with potential for significant environmental impact.
- NEPA's purpose is to:
  - promote efforts which will prevent or eliminate damage to the environment and biosphere and stimulate the health and welfare of man. NEPA § 102 [42 USC §4321]
  - ... assure for all Americans safe, healthful, productive, and aesthetically and culturally pleasing surroundings. [42 USC §4331]
  - ... attain the widest range of beneficial uses of the environment without degradation, risk to health or safety, or other undesirable and unintended consequences. [42 USC §4331]

#### **HIA and EIA**



- EIA typically focus on environmental effects rather than human health effects.
- HIA could be a complement to EIA/EIS or a stand alone process/report.
- EIA is required for some projects; HIA is voluntary
- Both focus on equity
  - EIA federal mandate to consider "environmental justice" communities
  - HIA EJ and other populations e.g. elderly, persons with disability, children etc.

# Health & Equity In Routine Planning Activities



- Alternative to project/policy specific HIAs
- Incorporate goals, objectives, performance measures to improve health and equity through planning process at all levels (corridor, city, county, region etc.)
- Affects all projects and policies developed pursuant to these plans

# Health & Equity In Routine Planning Activities

- Examples:
- Portland Plan
  - "Healthy Connected Neighborhoods" and "Portland Equity Initiative"
- Metro Regional Transportation Plan
  - Goals and objectives
- Gresham Transportation System Plan Update



#### **Questions/Discussion**