Screening vs. Scoping

**Screening**
- Project viability
- Conversations with potential partners
- Estimated likelihood & nature of impacts
- Initial Yes/no

**Scoping**
- Work plan & partnership details
- Health effects & research questions
- Assessment methodology & data needs
- Final Yes/no
Scoping: WHY, WHO, and HOW

• The primary purpose of scoping is to lay the foundation for assessment by developing a work plan that details

• Why are we doing the HIA? What are the goals?

• Who will be involved in conducting the HIA

• Who will be impacted by the decision

• How the decision will impact population health

• How the impacts will be assessed
Scoping Outcomes

1. A statement of the HIA **main goals** and **key health effects** considered.

2. A description of the **impacted population** and **key health outcomes**.

3. A brief summary and logic model of the **pathways** through which the population’s health and health determinants could be affected.
4. A summary of **how stakeholders will be engaged** (becomes your **list of who was involved in the HIA** during the reporting phase).

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Scoping Outcomes

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tomorrow's health today
Scoping Outcomes

5. A description of the **health determinants and outcomes** that will be assessed in the HIA.

6. A description of the **research questions**, data sources, and methods to be used.
Scoping Outcomes

7. Identification of apparent data gaps.

8. A timeline of assessment activities.

9. A work plan of the methods you will use to collect information on health outcomes and involve stakeholders.
Farm-to-School Bill Components

Reimbursement @ $19.58M

- Schools buy Oregon foods with 15 cents for lunch and 7 cents for breakfast
- Part of National Lunch and Breakfast Programs
- Federal matching funds
- 2% ODE administration funds

Food, Garden, Agriculture Education Grants @ $3M

- Support food, garden and agriculture-based activities
- Support gardens in schools
WHY: Oregon F2S Bill HIA Goals

1. Inform Oregon legislative decision process
2. Outline linkages & magnitude of interactions between the policy and health outcomes
3. Inform agency work plans
4. Inform regional institutional procurement efforts
5. Create model farm-to-school state-wide policy HIA
WHO: Oregon F2S Bill Impacted Populations

- Students
- Teachers
- Parents
- Low-income youth; racial and ethnic specific youth
- Low-income families
- Farming communities

- Farmers
- Processors
- Distributors
- School nutrition service staff
- Food industry workers, agriculture production labor
- Farmer/worker families
WHO: Oregon F2S HIA Team

- Oregon Public Health Division
- Oregon Department of Education
- Partners for a Hunger Free Oregon
- Oregon Department of Agriculture
- Ecotrust
- National Farm to School Network
- Oregon State University Extension
HIA Example: Oregon Farm-to-School Bill Stakeholder Engagement

- Screening
- Scoping
- Assessment
- Recommendations
- Reporting
- Evaluation, Monitoring

2 Advisory Committees
  - Key Informant Interviews
  - Network Survey
  - 2 Community Forums
  - Communications Workshop
HIA Example: Oregon Farm-to-School Bill

Scope -- Health Determinants

How does the proposed policy affect health determinants?

- Employment
- Diet and Nutrition
- Comprehensive K-12 Education
- Environmental Health
- Social Capital

and lead to predicted health outcomes?
HOW: Oregon F2S Bill Health Determinant Pathways

Reimburse School Districts

↑ School districts’ purchase of Oregon food

↑ School menu options

Food, Garden & Agriculture Education Grant Program

↑ School promotion of new local options

↑ Food activities in gardens, classroom & cafeteria

↑ Student gardening

Employment Outcomes

Environmental Health Outcomes

Diet & Nutrition Outcomes

F2SSG K-12 Education Program Outcomes

Social Capital Outcomes

tomorrow’s health today
HOW: Oregon F2S Bill Health Determinant Pathways, refined

Food, Garden & Agriculture Grant Program

↑ Education on nutrition, gardens and agriculture

↑ Student gardening

Δ Learning environment

↑ Positive behaviors
↑ Physical activity
↑ Learning, knowledge, achievement
↑ Youth self efficacy

↑ Food activities in gardens, classroom & cafeteria

↑ Youth preferences for fruits & vegetables
↑ Youth consumption of fruits and vegetables

Δ Youth diet and nutrition
△ Youth overweight and obesity

Figure 4.13 Farm to School and school garden education health determinant pathway
# HOW: Oregon F2S Bill General Research Questions

<table>
<thead>
<tr>
<th>Health Determinant Pathway</th>
<th>Central Research Question</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employment</td>
<td>How will the policy’s reimbursement program affect employment and related health outcomes?</td>
</tr>
<tr>
<td>Diet &amp; Nutrition</td>
<td>How will the policy’s reimbursement program affect children’s dietary and nutrition related health outcomes?</td>
</tr>
<tr>
<td>F2S/Garden Education</td>
<td>How will the policy’s education grant programs affect student learning and health outcomes?</td>
</tr>
<tr>
<td>Environmental Health</td>
<td>How will the policy’s reimbursement and grant program affect environmental health?</td>
</tr>
<tr>
<td>Social Capital</td>
<td>How will the policy’s reimbursement and grant program affect relationships?</td>
</tr>
</tbody>
</table>
Case Study: SE 122nd Avenue Planning Study (Portland, OR)

Read the case study description below. You will continue working on this case in additional exercises. The directions for each exercise follow the case study descriptions.

Background:

In 2009, the Portland Bureau of Planning & Sustainability (BPS) initiated a planning study for an area of SE Portland centered on a 2 mile stretch of SE 122nd Avenue, a 5-lane main arterial flanked by predominantly residential, auto-oriented development, with almost no neighborhood commercial activity or pedestrian infrastructure. There were two primary factors that motivated BPS to undertake this project. First, planners wanted an opportunity to apply a newly conceived neighborhood planning concept—the “20 minute neighborhood”—that had emerged from other recent planning efforts, particularly the development of the Portland/Multnomah County Climate Action Plan and the Portland Plan, a long-range strategic plan for the city that will soon be used to guide the
Exercise 1: Developing a Preliminary Scope

Directions

Answer the following questions using the information from the case study description above. (Spend about 15 minutes on this section)

1. What are the current neighborhood conditions this plan will affect?
SCREENING
SCOPING
ASSESSMENT
RECOMMENDATIONS
REPORTING
MONITORING &
EVALUATION
Assessment: Purpose

The purpose of the assessment is to characterize the potential health effects of alternative decisions based on available evidence.
Outputs of Assessment

1. Baseline data of affected populations - information on the existing conditions of the population, including:
   • health status
   • health indicators
   • vulnerabilities to health effects

Source: Health Impact Assessment: A Guide for Practice
Common Types of Evidence

- Existing population demographic data and health statistics, such as census data, vital statistics, agency reports
- Environmental measures, to assess hazardous agents or conditions
- Maps, to reveal “hot spots” or spatial differences
- Empirical research
- Qualitative methods, such as focus groups, key informant interviews, photovoice etc.
Data Limitations

• Some HIAs rely on proxy measures when rates of specific diseases are not available or are too small to calculate.

• For example, rather than providing an estimate of lung cancer rates in a small community, an HIA might identify smoking rates and important sources of airborne pollutants in the community’s airshed.

2. Characterization of the anticipated health effects of alternative decisions
Characterizing the Anticipated Effects

Four important and commonly described characteristics of health effects are:

1. Direction
2. Magnitude
3. Impact / Severity
4. Distribution
Characterizing the Anticipated Effects

<table>
<thead>
<tr>
<th>Health Determinant</th>
<th>Direction</th>
<th>Magnitude</th>
<th>Impact</th>
<th>Significance Likelihood</th>
<th>Distribution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Traffic Safety</td>
<td>↑</td>
<td>High</td>
<td>High</td>
<td>Very Likely</td>
<td>Affects whole community relatively equally</td>
</tr>
<tr>
<td>Physical Activity</td>
<td>↑</td>
<td>Medium</td>
<td>Medium/High</td>
<td>Very Likely</td>
<td>Impacts neighboring vulnerable community and whole community via expanded access</td>
</tr>
<tr>
<td>Access to Goods and Services</td>
<td>↑</td>
<td>Medium</td>
<td>Medium/High</td>
<td>Very Likely</td>
<td>Disproportional effect on low income, transit-dependent communities around DMA</td>
</tr>
<tr>
<td>Air Quality</td>
<td>↑</td>
<td>Low</td>
<td>Low</td>
<td>Possible</td>
<td>Affects whole community relatively equally</td>
</tr>
</tbody>
</table>

Source: Health Impact Assessment (HIA) of Proposed “Road Diet” and Re-Striping Project on Daniel Morgan Avenue in Spartanburg, South Carolina, March 2011
Outputs of Assessment

3. An evaluation of the level of confidence or certainty in the effects prediction
Characterizing Strength or Quality of Evidence

• HIA practitioners should select the strongest evidence and methods that are available for a particular decision context.

• The quality of the evidence used in an HIA can be assessed according to the core standards of the discipline in which the data originate.

  • For example, epidemiology studies should be evaluated according to the standards of that field, with attention to issues of confounding and bias.
# Characterizing Strength or Quality of Evidence

<table>
<thead>
<tr>
<th>Health Outcome or Health Determinant</th>
<th>Magnitude of Impact w/ HIA Recs.</th>
<th>Distribution</th>
<th>Quality of Evidence</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employment Impacts</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Health &amp; life expectancy</td>
<td>5</td>
<td>Farm sector and related jobs</td>
<td>****</td>
</tr>
<tr>
<td>Job creation</td>
<td>3</td>
<td>~270 new jobs</td>
<td>****</td>
</tr>
<tr>
<td>Oregon product demand</td>
<td>4</td>
<td>100—197 School Districts⁴</td>
<td>****</td>
</tr>
<tr>
<td>Workers’ ability to pay bills</td>
<td>2</td>
<td>~270 new jobs</td>
<td>****</td>
</tr>
<tr>
<td>Economic activity</td>
<td>4</td>
<td>3.16 economic multiplier</td>
<td>****</td>
</tr>
<tr>
<td>Impacts on Child Diet and Nutrition</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Meal program participation</td>
<td>3</td>
<td>561,698 public school children¹</td>
<td>**</td>
</tr>
<tr>
<td>Child learning &amp; academic attainment</td>
<td>3</td>
<td>561,698 public school children¹</td>
<td>****</td>
</tr>
<tr>
<td>Household food security</td>
<td>1</td>
<td>210,446 households²</td>
<td>***</td>
</tr>
<tr>
<td>School meal nutrition</td>
<td>1</td>
<td>561,698 public school children¹</td>
<td>*</td>
</tr>
<tr>
<td>Child overweight &amp; obesity</td>
<td>1</td>
<td>1 in 4 children</td>
<td>**</td>
</tr>
<tr>
<td>Farm to School and School Garden Education Impacts</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gardening education</td>
<td>5</td>
<td>~15,000 new children³</td>
<td>****</td>
</tr>
<tr>
<td>Child fruit &amp; vegetable consumption</td>
<td>3</td>
<td>561,698 school children¹</td>
<td>****</td>
</tr>
</tbody>
</table>

**Legend**

- ▪▪▪▪▪ Strong impact on many
- ▪▪▪▪ Strong impact for few or small impact on many
- ▪▪▪ Moderate impact on medium number or strong impact on few
- ▪▪ Small impact on few
- None No effect

- **** 10+ strong studies
- *** 5 -10 strong studies or data analysis
- ** 5 or more studies of weak and moderate quality; or studies have mixed results
- * <5 studies and claim consistent with public health principles
Transparency is Key

THE FACTS:

• You will not always have all the data you’d like to have

• There will not be always consensus on the predicted health effects of the project or policy under consideration

• There may not be consensus on how “strong” the evidence is.
Transparency is Key

• As HIA practitioners, it is our responsibility to be grounded in scientific neutrality and to admit uncertainty.

• Explanation of methods used in your HIA and the choices you made in methods of categorization should be stated explicitly.

• Example: What gets 5 stars in strength of evidence, and what gets 4?
HIA Example: Oregon Farm-to-School Bill Assessment Methods

1. Literature Review
2. Secondary Data Analysis
3. Economic Analysis
4. Community Input

<table>
<thead>
<tr>
<th>2009 Local Foods Jan-Dec</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vendor Name</td>
</tr>
<tr>
<td>-------------</td>
</tr>
<tr>
<td>FUJI PRODUCE 1</td>
</tr>
<tr>
<td>FUJI PRODUCE 1</td>
</tr>
<tr>
<td>FUJI PRODUCE 1</td>
</tr>
<tr>
<td>COASTAL BROKERS</td>
</tr>
<tr>
<td>HILLTOP PRODUCE</td>
</tr>
<tr>
<td>ORGANICALLY GROWN COOP</td>
</tr>
<tr>
<td>ORGANICALLY GROWN COOP</td>
</tr>
<tr>
<td>ORGANICALLY GROWN COOP</td>
</tr>
<tr>
<td>ORGANICALLY GROWN COOP</td>
</tr>
<tr>
<td>ORGANICALLY GROWN COOP</td>
</tr>
<tr>
<td>TUALATIN VALLEY POTATO</td>
</tr>
<tr>
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</tr>
<tr>
<td>TUALATIN VALLEY POTATO</td>
</tr>
<tr>
<td>TUALATIN VALLEY POTATO</td>
</tr>
<tr>
<td>DEL MONTE FRESH</td>
</tr>
</tbody>
</table>

Georgia State University
ANDREW YOUNG SCHOOL

Georgia Health Policy Center
### Exercise 2: Drafting Research Questions

**Instructions:** Choose one health determinant or outcome from your pathway diagram and draft 2-3 research questions each for determining existing conditions and potential impacts. An example is below.

<table>
<thead>
<tr>
<th><strong>Project:</strong></th>
<th>LOPT Transit Study</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Health Determinant/Outcome:</strong></td>
<td>Concentration of outdoor air pollutants</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Research Questions:</strong> (of health determinants and health outcomes)</th>
<th><strong>Research Questions:</strong> (on health determinants, outcomes)</th>
<th><strong>Possible Indicators</strong></th>
<th><strong>Data Sources</strong></th>
<th><strong>Methodology</strong></th>
<th><strong>Priority (High, Medium, Low)</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>What are current levels of diesel engine-related air pollutants in the Hwy 43 corridor?</td>
<td>How will concentration levels of these pollutants change as a result of the different scenarios?</td>
<td>Modeled existing concentration levels of key air toxics; Gallons of diesel used in construction</td>
<td>DEC’s PATS database, DEIS projections for diesel use in construction, EPA/OSHA reports on construction AQ</td>
<td>Project emissions from construction activity based on different fleet scenarios</td>
<td>Med/ high</td>
</tr>
</tbody>
</table>
SCREENING
SCOPING
ASSESSMENT
RECOMMENDATIONS
REPORTING
MONITORING & EVALUATION
Good Recommendations Are...

1. Responsive to predicted impacts
2. Specific and actionable
3. Experience-based and effective
4. Enforceable
5. Able to be monitored
6. Technically feasible
7. Politically feasible
8. Cost-effective
9. Unaccompanied by additional negative consequences
10. Implementable within the regulatory, administrative, or legislative framework of the proposal being considered
A Tale of Two Recommendations...

• Construction activities related to infrastructure development would result in temporarily elevated levels of certain hazardous air pollutants.

• Amounts of air toxics produced during construction can vary greatly depending on the age and condition of the construction equipment.
A Tale of Two Recommendations...

<table>
<thead>
<tr>
<th>The Recommendations</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Metro (the planning agency) should encourage contractors to use better equipment.</td>
<td>TriMet (the contracting agency) should work with the State Clean Diesel program to develop more stringent emissions-based equipment fleet requirements or incentives for contractors and sub-contractors working on the project.</td>
</tr>
<tr>
<td>Responsive to predicted impacts</td>
<td>+</td>
</tr>
<tr>
<td>Specific and actionable</td>
<td>-</td>
</tr>
<tr>
<td>Experience-based and effective</td>
<td>+</td>
</tr>
<tr>
<td>Enforceable</td>
<td>+</td>
</tr>
<tr>
<td>Able to be monitored</td>
<td>+</td>
</tr>
</tbody>
</table>
A Tale of Two Recommendations...

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<th>The Recommendations</th>
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<th>TriMet (the contracting agency) should work with the State Clean Diesel program to develop more stringent emissions-based equipment fleet requirements or incentives for contractors and sub-contractors working on the project</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Technically feasible</strong></td>
<td>![Yes]</td>
<td>![Yes]</td>
</tr>
<tr>
<td><strong>Politically feasible</strong></td>
<td>![No]</td>
<td>![Yes]</td>
</tr>
<tr>
<td><strong>Cost-effective</strong></td>
<td>![Yes]</td>
<td>![Yes]</td>
</tr>
<tr>
<td><strong>Do not introduce additional negative consequences</strong></td>
<td>![Yes]</td>
<td>![Yes]</td>
</tr>
<tr>
<td><strong>Implementable within the regulatory, administrative, or legislative framework of the proposal being considered</strong></td>
<td>![Yes]</td>
<td>![Yes]</td>
</tr>
</tbody>
</table>
Findings:

• School reimbursement funds would:
  o Create and maintain up to 800 jobs for Oregonians over 5-10 yrs
  o Increase student participation in school meals program
  o Improve household food security

• Food, garden and agricultural grants would:
  o Increase childhood food preferences for fruits and vegetables
  o Shape long-term healthy diet choices that affect children’s learning and academic achievement while preventing obesity
HIA Example: Oregon Farm-to-School Bill Recommendations

To maximize positive job growth and food security impacts:

• Rec #1 -- Modify language of the bill so that only items “produced” or “processed” in state are eligible for reimbursement

To maximize child nutrition, food security, and student learning benefits, for education grant recipients:

• Rec #2 -- Prioritize schools serving:
  – Low income;
  – Ethnically/culturally diverse student populations;
  – Food insecure areas

• Rec #3 -- Prioritize schools developing multi-component programs (i.e.; procurement, promotion, & education w/community support)
Exercise 3: Drafting Recommendations

Instructions: Answer the questions below and discuss with your group.

1. **Mitigation recommendations.** For the hypothetical negative impact below, develop a recommendation or two for mitigating the impact. Try to make the action as specific and actionable as possible. What needs to be done, and who needs to do it?

   **Hypothetical negative impact:** The SE 122nd Ave Plan recommendations will increase the potential for bike and pedestrian crashes with cars as a result of increased bike and pedestrian traffic in and around the plan area.

   **Possible recommendation(s) for mitigating impacts:**