Health Impact Assessment: Oregon’s Practitioner Toolkit
A Handbook for Conducting Rapid HIAs (2nd Edition)

Oregon Health Authority
Center for Health Protection
Environmental Public Health
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# Table of Contents

## Introduction and Purpose

- Introduction and Purpose

## The Social and Environmental Determinants of Health

- Supporting Health in All Policies

## Introduction to HIA

- What is Health Impact Assessment (HIA)?
- The HIA Process
- The Six Steps
- Types of Health Impact Assessments and Processes

## Screening

- Screening 101
- Factors to consider when screening a project
- Screening exercise
- Sample: Screened-out projects

## Scoping

- Scoping 101
- Outcomes and Considerations
- Samples: HIA goals, HIA research questions
- Scoping exercises
- Sample: Pathway
- Developing HIA Assessment Questions
- Contracting Out HIA Work
- HIA Internships

## Community Engagement

- Community engagement basics for an HIA
- Utilizing community engagement to create an efficient HIA
- Sample: Advisory committee meeting agendas

## Assessment

- Assessment 101
- Creating an Existing Conditions profile
- Creating an impact assessment
- Assessment research resources
# Table of Contents

## Recommendations and Reporting  
- Recommendations  
- Reporting overview  
- Rapid HIA Report Sample Outline  
- HIA Process Information to Include in Report  
- Practitioners’ Appendix

## Monitoring and Evaluation  
- Sample Advisory Committee Survey Questions  
- HIA Evaluation Resources

## Resources  
- HIA in Oregon  
- Sample HIA Projects  
- References  
- Glossary
Introduction and Purpose

Our health and well-being is influenced by many individual factors such as who our parents are, what food we eat, and whether we have access to health care. But health is more than genes and personal choices. The places where we live, work, and play have significant influences on our health. For example, having access to sidewalks and community destinations affect how much we walk—and living close to major roads and freeways increases our risk for chronic diseases like asthma and heart disease. The field of public health calls these greater influences the Social and Environmental Determinants of Health.

Public health has many tools available to support the consideration of these health determinants in community planning and policy work. One of these tools is Health Impact Assessment (HIA). HIA is a formal, defined framework that purposefully broadens the concept of health to include social and environmental determinants when making program, project, and policy decisions.

HIA’s structured process synthesizes current conditions along with evidence and input from a variety of disciplines and stakeholders, to provide an understanding of the potential health impacts of a decision - before it is finalized. This information enables decision-makers to develop evidence-based approaches that promote health for all.

This toolkit is intended for county and other local public health departments who are conducting their first or second HIA. This toolkit provides basic information about conducting HIAs, including a step-by-step process to follow and resources for additional information.
The social and environmental determinants of health

Health is more than what happens in your doctor's office. The places where we live, learn, work, and play have a greater impact on our health than does seeing a doctor regularly. If essential supports beyond health care are missing in your workplace or neighborhood you may still get injured or be sick. Essential social, economic and environmental supports include clean air, safe places to be active, access to healthy foods and affordable homes.

Research indicates that your zip code has a stronger influence on your health than your genetic history. The World Health Organization’s 2008 Commission on the Social Determinants of Health found that more than half of world-wide differences in health outcomes could be explained by the environments in which people live, work, and play. Our individual choices are based on the options we have available to us. This is why planning and developing communities with adequate health supports can improve the odds that everyone reaches their full health potential.
Overview of Health Impact Assessments

What is a Health Impact Assessment (HIA)?

Health Impact Assessment (HIA) is a tool that is being used with increasing frequency around the world. It was developed in the European Union in the 1990s and ratified by consensus of the World Health Organization. The most commonly cited definition of HIA was provided in what is known as the Gothenburg consensus paper: “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”. ¹

HIAs are guided by the World Health Organization’s definition of health: “A state of complete physical, mental and social well-being and not merely the absence of disease or infirmity”. ²

An HIA, as endorsed by the World Health Organization, aims to ensure that:

- People can meaningfully participate in a transparent process for the formulation, implementation and evaluation of policies that affect their health, both directly and through elected political decision-makers,
- Both positive and negative impacts are shared equitably across a community,
- Both short-term and long-term impacts are considered in the decision-making process, and
- Different scientific disciplines and methodologies are used as needed to get as comprehensive an assessment as possible.
Simply put, HIA is a structured but flexible process that helps decision-makers understand the direct and indirect health impacts of their work. This information allows decision-makers to weigh tradeoffs and amend proposals before a decision is made so the final decision protects and promotes health for everyone in the community.

HIA is recommended by the Centers for Disease Control and Prevention, the National Research Council, and the US Department of Health and Human Services. Several national reports have recommended the use of HIA, including the Committee on Public Health Strategies to Improve Health, the US Department of Health and Human Services Action Plan on Disparities and the White House Childhood Obesity Task Force and Action Plan.

**Resource for practitioners and decision-makers:**

_HIA: A Tool to Help Policy Makers Understand Health Beyond Health Care_ (Cole and Fielding, 2006). The article gives clear and persuasive language about the uses and benefits of HIA.
The HIA Process

HIA requires the completion of a six step process. A thorough description of each step is provided in the following chapters.

Overview of the Six Steps

Screening — This is the first step of any HIA. The screening step is when we determine if an HIA on a proposed decision would be useful and/or appropriate. The screening step could be completed with a group of stakeholders because it involves the consideration of several factors, including whether: a) the proposed decision affects health; b) a report can be completed and recommendations made in time to inform the proposed decision; c) the HIA will add value to the decision-making process, and d) resources exist to complete the assessment.

Scoping — After determining that an HIA would add value, the scope of the project must be determined. Which health impacts will be considered? Which project components have the greatest impact on health? Which populations will be affected by this proposal? These are some of the questions to be answered through scoping. Scoping also helps determine how in-depth the analysis will be based on the time and resources available. Scoping could be completed with a group of stakeholders, or reviewed by a group of stakeholders.

Assessment occurs in two steps:

- *Creating an Existing Conditions Profile* for a geographic area and/or population in order to understand baseline conditions and to be able to predict change.
- *Evaluating Potential Health Impacts*, including the magnitude and direction of impacts, using quantitative and/or qualitative research methods and data.
**Recommendations** — The assessment will result in a set of conclusions about the health impacts of the proposed project or policy you have studied. From these conclusions, the HIA Project team develops recommendations targeted toward changes to the project or policy that could minimize the negative and maximize the positive health impacts.

**Reporting** occurs in three steps:

*Creating a written or visual presentation* of the HIA results.

- This can take many forms including written reports, power point presentations, and comment letters.

2) *Communicating the results* within the decision-making process.

- A communications plan can include media outreach and public testimony, among other means.

3) *Preparing a final HIA report.*

- The final HIA report can be presented in several formats, including a full report, a letter to decision makers or a contribution to an Environmental Impact Statement. An critical part of reporting is dissemination of your final product to decision makers and other stakeholders through various avenues.

**Monitoring and evaluation** — After an HIA is completed, the project or policy should be monitored so that you can judge whether your HIA was successful. Did the decision-makers utilize your recommendations about health in their final decision? Were the recommendations followed when the project was implemented? Did your HIA have other impacts, either anticipated or unanticipated? Continued monitoring of your HIA and the project or policy can help answer some of these questions. Collecting information from monitoring can help you evaluate whether your HIA achieved its goals.

**HIA Resource**

For a thorough guide on HIA, read *Improving Health in the United States: The Role of Health Impact Assessment* by the Committee on Health Impact Assessment of the National Research Council. A PDF is available for free download at the National Academies Press’s website [www.nap.edu](http://www.nap.edu)
Types of Health Impact Assessments and Processes

There are three main types of HIAs, each with a different process and timeline: Rapid, Intermediate and Comprehensive. Their respective timelines reflect their level of complexity and the resources available for carrying out the HIA. The following definitions come from the International Association for Impact Assessment and the World Health Organization: 4, 6

**Rapid: 3-6 months** — A rapid (or mini) HIA is done quickly, as the name suggests. This may be a ‘desk-top’ exercise that relies on easily-gathered information that can be compiled through a half-day or one-day workshop with key stakeholders. This type of HIA uses the most readily available information to quantify the potential health impacts which are identified.

**Intermediate: 6-12 months** — An intermediate HIA could combine desk-based work with a workshop that engages key stakeholders. This type of HIA yields a more detailed picture of the potential health impacts of the proposed project or policy than does a rapid HIA. Intermediate HIAs may also involve a limited literature search and rely on routine, readily available data.

**Comprehensive: 12-24 months** — A comprehensive HIA is a more detailed and rigorous exercise than either a rapid or intermediate HIA. It involves the participation of the full range of stakeholders, an extensive literature search and analysis of existing data and the collection of new data.

<table>
<thead>
<tr>
<th>Rapid</th>
<th>Intermediate</th>
<th>Comprehensive</th>
</tr>
</thead>
<tbody>
<tr>
<td>Short Timeline</td>
<td>Table Top / partially engaged HIA</td>
<td>Long Timeline</td>
</tr>
<tr>
<td>Table Top HIA</td>
<td>Literature Review and primary data collection</td>
<td>Fully engaged HIA</td>
</tr>
<tr>
<td>Literature Review Based</td>
<td>Moderate Community Engagement</td>
<td>Literature Review and primary data collection</td>
</tr>
<tr>
<td>Limited Community Engagement</td>
<td>Primary research: Moderate</td>
<td>Full Community Engagement</td>
</tr>
<tr>
<td>Primary research: Minimal</td>
<td></td>
<td>Primary research: Extensive</td>
</tr>
</tbody>
</table>

**HIA Spectrum**
Screening

Screening 101

Screening is the first step of any HIA. It is at this time that we evaluate the variety of factors regarding the proposed policy, project or plan to determine whether or not there is a need for conducting an HIA or if it will add value. A poorly screened HIA may at the very least consume considerable resources; at most, the HIAs findings and recommendations may not contribute any additional useful information or insight into the item at hand. Screening provides a clear process for selecting a policy, project, or plan where an HIA will add value.

Factors to Consider when Screening a Project

There are three key factors that must be considered during the screening step, when verifying the need and value of an HIA. These key factors include timing, value, and feasibility. For a full list of questions to answer when screening a project, look at the screening exercise on page 14.

1) Timing

The purpose of HIAs is to inform decision makers of potential health impacts before they make decisions. HIAs are conducted when a project, plan, or policy has been proposed, a final decision about whether to adopt the proposal has not yet been made, and there is sufficient time to conduct an analysis before the decision is made. The impact of an HIA can be maximized by conducting it as early as possible in a decision, preferably in the first round, so that recommendations become part of the plan as it undergoes revisions.
2) Value
An HIA adds value to the decision-making process if the decision in question has the potential to affect the environmental or social determinants of health of a given population. HIAs can analyze the negative or positive health outcomes of a decision and can often evaluate health impacts that are not likely to be considered without the HIA. These impacts may not be considered for various reasons, including a lack of resources/expertise on the part of the decision-makers, a lack of understanding about the potential for health impacts, or because the impacts are limited to a narrow but potentially vulnerable population.

Even if health is being considered in the decision-making process, an HIA could still add value. This would be true if the proposal’s impact on health outcomes is potentially significant, if a large number of people are being impacted, or the potential magnitude and scope of the impacts are substantial. An HIA can also identify whether a proposal has the potential to increase or decrease existing health inequities.

3) Feasibility
The feasibility of an HIA is the third key factor to consider when screening a project, and is just as important as timing and value. During screening, consider the following questions about feasibility:

- Does the decision-making process allow for input?
- Is the project politically feasible?
- Do you have the expertise, evidence, and research methods to conduct the assessment?
- If the proposal is really large and raises a lot of health questions, is it possible to choose a manageable piece of the proposal?
- Do you have partners who can meaningfully participate in the HIA?
- Do you have the internal resources, such as staff time and skills, necessary to conduct the assessment?
- Does your leadership support the assessment?
Screening Exercise

Date/ Participants Involved in Screening (Name/affiliation):

Questions/ Considerations:

- What policy, project, or plan under consideration by a decision-making body will your HIA try to inform?
- What is the decision-making timeline on this specific policy, project, or plan? Is there sufficient time to complete an HIA prior the final decision?
- Describe the decision-making process. Is there an opportunity within this process to present the HIA findings and recommendations?
- Has health been (or will health be) considered during the decision-making process? Is the completion of another assessment, such as an EIS, required for this specific policy, plan, or project? If so, will the assessment comprehensively consider health?
- What health determinants will this decision impact?
- List the stakeholders who can influence or are impacted by the decision regarding the plan, policy, or project.
- What resources will be available to you (i.e. staff, assessment tools, existing data, etc.) when conducting an HIA on this specific proposal? Are these resources enough to complete a thorough rapid HIA that a) involves necessary stakeholders, and b) researches all aspects of health regarding the issue?
- Is there enough reliable, health-related data available to inform the decision-making process?
- Detail the political context of the decision-making process. Will the decision-makers ultimately use recommendations and findings from an HIA to inform their decision?
- Would an HIA establish new partnerships (between community members or departments) that currently do not exist?
- Would this HIA increase the support for future HIAs in your region?

Outcome of the screening: (i.e. was the HIA screened “in” or “out”). Describe the reasoning behind screening decision.
Examples of “Screened Out” projects

Example #1
Screened Out: A plan to improve walkability, Chula Vista, CA
This potential HIA would have examined a proposed plan to improve walkability in Chula Vista, CA. The proposal was focused in the downtown area, and included plans for traffic calming measures, increased intersection guidance, and bicycle lanes.

Why not do an HIA?
- The plan was already considering health. (Value)
- An HIA would have concluded that the plan would have a positive impact on health, and therefore lacked an opportunity to develop useful recommendations. (Value)
- Health advocates were already involved in the design of the plan.
- Time and resources would be better used to bring health into a decision-making process where it is not already being considered. (Value)

Example #2
Screened Out: Proposed WalMart distribution center, Merced, CA
This potential HIA looked at a proposal to locate a WalMart distribution center in a Central Valley town, near a school. Concerns included increased truck traffic near the school, air quality impacts, and traffic accidents.

Why not do an HIA?
- Consideration of HIA came after the draft environmental review was published, and just a month before the final draft was due. (Timing)
- County Supervisors were not open to addressing health concerns. (Feasibility)
- Health advocates had already developed a list of suggested mitigations that had been ignored for the project. (Value)
- Time and resources would be better used to explore legal options, and to support the election of more health-focused Supervisors. (Feasibility)
Scoping

Scoping 101

The main purpose of the scoping process is to create a workplan for the HIA that is feasible, inclusive, and well-defined. Such a workplan will allow stakeholders to understand the extent of the assessment that will be conducted, as well as the goals, research questions to be answered, potential approaches (data collection, community engagement, etc.), stakeholder responsibilities, and definitions of vague terms.

Generally, the scoping process will attempt to answer the following 6 questions in order to finalize scoping outcomes:

Why is the HIA being conducted (what are the goals)?
Who will be involved in conducting the HIA?
Who could be impacted by the proposed decision?
How will the proposed decision impact population health?
How will the health impacts be assessed?
What resources are needed to conduct the assessment?
Outcomes and Considerations

The scoping process should result in the completion of the following HIA outcomes:

- A statement of the main goals for the HIA,
- A description of which alternatives will be assessed,
- A description of the impacted population, including vulnerable groups that are likely to be affected,
- A summary of how stakeholders are to be engaged,
- A list of people participating in the HIA, and their respective roles and responsibilities,
- A brief summary of the pathways through which the population’s health and health determinants could be affected and the health effects to be addressed, including any logic models or scoping tables that were completed,
- A description of the health determinants and outcomes that will be assessed in the HIA, as well as the rationale for why they were selected over others,
- A description of the research questions, data sources, and methods to be used,
- Identification of apparent data gaps and of data collection that could be undertaken to address the gaps or a rationale for not collecting data, and
- A timeline of assessment activities, including who is responsible for completing each activity.

Stakeholders and Scoping

Sometimes local health departments need outside staff and/or expertise to complete the scoping phase. Stakeholders, including people connected to the decision-making process, could provide essential information during the scoping phase, such as the ins and outs of the decision-making process, political considerations, and available data.
Sample HIA goals

Washington County’s Augusta Lane HIA

Provide evidence-based recommendations to support leadership in their decision on whether or not to pursue funding for the construction of a bicycle and pedestrian bridge connecting Augusta Lane over Beaverton Creek.

Provide an opportunity for community members (particularly vulnerable populations) to provide feedback about the bridge design and possible construction.

Promote consideration of health impacts in land-use and transportation planning decisions.

Strengthen relationships between Washington County Public Health Division and Washington County Department of Land Use and Transportation.

Build capacity within Washington County Public Health Division to utilize the HIA process for other decisions impacting the county.

OHA’s Climate Smart Scenarios HIA

Provide evidence-based recommendations to aid decision-makers in understanding potential health impacts and tradeoffs of the Climate Smart Communities Scenarios strategy options.

Build and strengthen relationships between the Oregon Health Authority and Portland Metro-region governing and planning bodies.

Promote consideration of health impacts in transportation planning and climate change mitigation efforts throughout the state.

Promote HIA practice in Oregon.
Scoping Exercises

Exercise #1: Identifying stakeholders who will be involved in the HIA
Example provided by the National Network of Public Health Institutes

**Instructions:** On the next page, add as many possible stakeholders to the list. When thinking about stakeholders to add, keep the following two questions in mind:

- Who might have resources to contribute, such as money, staff time, or information useful for assessing health issues, existing conditions, and potential impacts?
- Who would help give the HIA findings and recommendations credibility in the eyes of decision-makers and key stakeholders?

### Common Stakeholder Categories:

| Community-based organizations | Industry, developers, and businesses |
| Residents                     | Public agencies                      |
| Service providers             | Statewide or national advocacy organizations |
| Elected officials             | Academic, learning and research institutions |
| Decision-makers               | HIA consultant organizations          |

### Common Stakeholder Roles:

- HIA Advisory Committee Member
- HIA Team member—help conduct assessment and produce deliverables
- Information Resource
- Technical Advisor
- Audience member
<table>
<thead>
<tr>
<th>Stakeholder group/key contact</th>
<th>Why are they interested in the HIA or related decision?</th>
<th>Power to influence the decision (high, medium, low)</th>
<th>How and when (what stage) to engage?</th>
<th>Potential role in/contribution to HIA (Advisory Committee member, team member, audience, information resource, etc)</th>
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**Exercise # 2: Identifying and describing the impacted population(s)**
Example provided by the National Network of Public Health Institutes

_Instructions:_ Complete the questions below.

<table>
<thead>
<tr>
<th>What is the geographic scope of the potential impacts? Are there likely to be regional variations?</th>
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</table>

<table>
<thead>
<tr>
<th>What are the primary socio-demographic sub-groups that live in or otherwise use the impacted areas (i.e., children, elderly, low-income populations, ethnic minorities, refugee populations, etc.)?</th>
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<table>
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<tr>
<th>Which of these sub-groups can be considered vulnerable and why (due to likelihood of having pre-existing health problems, heightened vulnerability, and/or lack of resources for avoiding or mitigating negative impacts)?</th>
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<tr>
<th>What is the temporal scope (short term vs. long term) of the potential impacts? Is there likely to be clear differences between short-term and long-term impacts?</th>
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Exercise # 3: Considering Pathways to link the proposed decision to health
Example provided by the National Network of Public Health Institutes

Creating a pathway model can assist with identifying the health determinants and the populations that could be affected by the proposed decision. Also, it can also help identify those health effects that should be addressed within the HIA.

**Instructions:** List and connect the necessary pathways linking your decision to health determinants and outcomes (see examples).

<table>
<thead>
<tr>
<th>DECISION</th>
<th>DIRECT IMPACTS</th>
<th>HEALTH DETERMINANTS</th>
<th>HEALTH OUTCOMES</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Example:</strong> Adoption of light rail</td>
<td>Increased transit service</td>
<td>Increase in opportunities for physical activity</td>
<td>Decreased levels of stroke, diabetes, colon cancer, heart disease, and high blood pressure.</td>
</tr>
</tbody>
</table>
Sample HIA pathway and analysis plan

Climate Smart Scenarios Pathway 1  
(Community Design Strategies)

Policy | Direct Impacts | Intermediate Outcomes | Health Outcomes

↑ Bicycle mode share  
↑ Transit service level  
↑ % trips paying for parking  
↑ Avg. daily parking fees

↑ Active transportation  
↓ Vehicle miles traveled (VMT)

↑ Physical activity  
↓ Collisions  
↓ Air pollution

↓ Chronic diseases: Heart disease, stroke, diabetes, cancer
↓ Obesity
↓ Fatalities & injuries
↓ Respiratory & cardiovascular diseases

Climate Smart Scenarios HIA Analysis Plan

Background/Existing conditions  
Potential impacts, outcomes  
Compare business as usual and other scenarios  
Health outcomes

Metro reports re: regional VMT, GHG emissions, household travel

Systematic literature review, updated pathways diagrams, strength and quality of evidence summary table

Integrated Transport and Health Impacts (ITHIM) model – includes physical activity, PM 2.5, collisions

From lit review and pathways, some ITHIM: Δ Chronic diseases: Heart disease, stroke, diabetes, cancer; Obesity
From ITHIM: Δ Fatalities & injuries due to collisions
From lit review and PATS: Δ respiratory disease, cancer due to air toxics exposure

Mapping: bike/ped/transit infrastructure, access; equity; vulnerable pops, disproportionate impact
Developing and Selecting HIA assessment questions

Once goals have been written and you’ve determined what areas of focus you want to include in the HIA, it’s time to develop the research questions that the assessment will help to answer. Questions could focus the direction (positive or negative) of the decisions’ likely health impacts; the magnitude (size) of the impact on and within the community; on existing research behind individual connections between the decision and health outcomes; the predicted differences between health before and after implementation; a comparison between different decision options; on community feelings about the decision; and/or on the impact to vulnerable populations.

It’s likely that you’ll come up with more questions than you can reasonably answer during a rapid HIA. By answering the following “framing” questions, you can determine which research questions to keep, and which to leave out of your assessment plan.

Framing questions (for limiting scope)

- Will the answer to this question add new information to a priority area?
- Will the answer to this question help decision-makers understand trade-offs?
- Will the answer to this question provide information that has applications within the county?
- Are there available resources necessary to answer the question, such as evidence, time, and assessment tools?
Sample assessment questions

2012 Benton County Roundabout HIA

The objective of this HIA was to identify and measure the possible health impacts of installing a traffic calming “roundabout” at the intersection of 53rd and West Hills in Benton County. The following research questions guided this health assessment and identified areas of focus:

- In general, what are the potential impacts of roundabout intersections on health?
- How does the installation of a roundabout compare to other intersection options when measuring for health?
- What roundabout policy options can be adopted in Benton County?
- What are the specific impacts of these policy options on current health levels?
- What mitigations are available to minimize any negative health impacts associated with proposed policy options?
- Which, if any, is the policy option that would have the most benefit to health?

2014 Washington County August Lane HIA

Through the screening and scoping processes, the team agreed that the research question to be addressed by the HIA is “If a bicycle and pedestrian bridge is constructed over Beaverton Creek, how will it impact health?”. This decision will provide Washington County Department of Lane Use and Transportation (WCDLUT) leadership with valuable information when they decide whether or not to pursue funding for this project. A series of secondary questions were defined by the team as well, and will help guide this research. These questions include:

- What are the health benefits of kids walking to school?
- What are the barriers that might prevent kids from walking more?
- What are the safety concerns the community has regarding a bridge?
- What can be done to address the safety concerns?
- How would the construction of the bridge impact bus service?
Contracting out HIA work

Staffing limitations don’t have to stop county health departments from conducting their first HIA. New practitioners often contract out some or all of their first HIA. Doing so can help new practitioners learn the HIA framework while being supported by an experienced practitioner, or even fully following someone else’s lead. This can help counties feel more confident of their final project. Since HIA funding is typically one-time funding, contracting out a portion of the work also helps balance workloads.

When working with a contractor on an HIA, take the time to engage them in the process early, ideally during the scoping phase. But it’s not necessary to contract out the full assessment. Oregon HIA projects have contracted out HIA work in several different ways:

Hood River’s Barrett Park HIA was conducted almost entirely by a local health nonprofit with close ties to vulnerable populations in the county. The local health department staff participated actively in the HIA by convening the advisory committee, sharing county health department data, reviewing and revising reporting materials, and presenting the HIA findings to the Hood River Parks District.

Washington County contracted with the Center for Inter-Cultural Organizing (CIO) to support their Augusta Lane Pedestrian Bridge HIA. CIO held community meetings to understand community concerns and desires for a proposed pedestrian bridge in their neighborhood. CIO did all the organizing and outreach for the meetings, while health department staff provided health information and made sure that agency partners were able to attend.

Curry County contracted with a researcher from Upstream Public Health to conduct a thorough literature review to help the county and their partners understand the connections between substandard housing and public health outcomes in their Housing Stock Upgrade Initiative HIA. Upstream also sent the researcher to a public meeting to help support a presentation to the advisory committee, and a committee-led revision of the draft recommendations that were informed by the research.
Contracting Lessons Learned

- Clearly identify roles and responsibilities, including exact deliverables and timelines. Provide sufficient time between when a contractor completes a deliverable and your project deadline, so you can review and revise all deliverables prior to review by HIA stakeholders and your agency’s leadership (if required).
- The stakeholder engagement component of the HIA (identifying who to involve, communicating with them about the project, etc) is probably the hardest one for a contractor to do since contractors are unlikely to have the necessary local knowledge to do it efficiently and effectively. Even if the rest of the HIA is being done largely by the consultant, some department staff time (~5-10 hrs/month) will need to be dedicated to this.
- Given the time it takes to develop and administer a contract and become familiar enough with a project, its difficult for contractors to effectively and efficiently support a project for less than about $5,000 even if the contractor is only working on a portion of the project.
- For small contracts, its easier to establish payment amounts for different deliverables or sets of deliverables, as opposed to having the contractor bill for the number of hours worked on the project.
- Remember that contractors can bring a lot of experience and insight to a project. If you're just looking for someone to do what you tell them to do, you'll limit your ability to learn from their expertise.
Sample Contract Language

**Contractor** will provide consulting and support services to permit **County** to complete a Health Impact Assessment. **Contractor** shall provide the following reports, as specified in the OHA 2015 HIA mini-grant schedule and as described in OHA’s “Health Impact Assessment: Oregon’s Practitioner Handbook, 2nd Ed.” **Contractor** shall additionally produce a document that summarizes the HIA process for the **Community**.

**County** staff will be made aware of procedures to develop reports and related materials to support their ability to monitor and evaluate the HIA process. **County** shall be responsible for dissemination and submission of all reports referenced in this Exhibit.

**Mini-report #1: Existing Conditions**
Per OHA’s reporting guidance, this report will provide a general overview of the community, including population health vulnerabilities, inequities in health outcomes, and an overview of other existing conditions relevant to the assessment. To the extent possible, demographic and health outcome information will be reported at the local, county and state levels and will be stratified by race/ethnicity, age, and income. This report will be approximately 5-10 pages in length, and will include tables, maps, and associated explanatory text. The report is due as required by the OHA 2015 HIA mini-grant schedule.

**Mini-report #2: Scoping**
Per OHA’s reporting guidance, this report will include a description of the HIA’s scope, the HIA’s goals, the process for engaging stakeholders, and identification of how to assess potential disparate impacts on vulnerable populations. The description of the project scope will include identification of which health issues to assess, which populations will be impacted, and which data methods will be used during assessment. This report will be based on input from meetings with **County** staff and project stakeholders, as well as on relevant research. The report will also detail how decisions were made regarding the HIA scope and project goals. The report will be approximately 5-10 pages in length. The report is due as required by the OHA 2015 HIA mini-grant schedule.
Mini-report #3: Assessment
Per OHA’s reporting guidance, this report will detail the data and methodologies used for assessment and describe the findings. To the extent possible, the findings will be used to characterize health impacts in terms of their direction, likelihood, and distribution within the population. Relative health impacts for each of the alternatives under consideration will be summarized in an easy-to-read effects characterization table. The report will also detail the limitations and uncertainties of the data and methodologies used. The report will be approximately 5-10 pages in length. The report is due as required by the OHA 2015 HIA mini-grant schedule.

Final HIA Report
Contractor will compile mini-reports into a final draft report that contains all information required by OHA’s HIA Program guidance. As part of the report, Contractor will develop a two-page executive summary. Contractor will submit the report to the County by July 15th for County review, and revise as needed before August 2.
HIA Internships

Internships can be an efficient and effective way to increase HIA team capacity when conducting a Rapid HIA. One or two student interns can provide enough administrative or research support to free up staff so that they can work on other areas of the assessment. Additionally, internships provide a unique chance for interns to learn about and gain experience in an exciting new field, to accumulate internship hours for a collegiate program, to make contacts in a department of interest, and to practice concepts and techniques that they may have learned from class or previous experiences.

Although interns can be a wonderful addition to an HIA team, they need thoughtful preparation prior to position announcement and hiring. The following sections outline the details that will benefit both interns and the health department.

Internship Preparation

- Create a position description that describes the roles, responsibilities, and skill requirements for the placement. Desired skills could include excellent written and oral communication, experience writing formal reports, research skills, community engagement experience, and expertise in the fields or areas included in the HIA.
- Create a document that thoroughly describes the final product that the intern will complete by the end of their placement. The workplan for the position should list the identified tasks with due dates, including interim dates.
- Establish which staff member will act as the primary manager to the intern. All intern-related work requests should go through this manager to prevent confusion and to establish clear lines of communication.
- Develop materials for a training session. These materials could include information about the HIA work assigned to the intern and the environment in which the intern will work. The goal is to integrate the intern into the office so that they do not feel like an outsider.
- Establish a workspace for the intern and prepare necessary resources (i.e. computer access, email, etc.).
Keys to a Successful Internship

Hold an Orientation/Training Session

A common complaint from interns is that they were not provided adequate training or information prior to starting their work. Therefore, hold a session at the beginning of the internship to discuss the following:

- Review the overarching details of the project explaining how the internship position fits in. Provide materials that will assist the intern in better understanding their assigned tasks and the larger project.
- Review the job description (roles and responsibilities) and the document that describes the final product that the intern will be completing.
- Review the workplan and the identified due dates.
- Train the intern on work related items.
- Provide organizational information, such as an organization chart, and introduce the intern to all of their colleagues.

Develop learning objectives

Learning objectives allow the interns to understand the skills and competencies that they will learn by the end of their internship. This will provide them with an idea of the benefits that they will gain from the position and help them realize that the position is more than just administrative support.

Include the intern on all HIA-related meetings

As previously mentioned, the goal is to help integrate the intern into the HIA team and help them feel like they are a part of the office. Interns, due to their title as a non-staff member, can easily feel isolated and unwelcomed. This inclusion will help them feel like they are a integral part of the project.

Establish a weekly intern/manager meeting time

A weekly meeting provides a time and place where the interns can present the work they have completed during the previous week, review upcoming due dates and establish a workplan for the following week. A set meeting time is a useful way to prioritize your support and oversight.
Community Engagement Basics for an HIA

Stakeholder participation within the HIA process is crucial when it comes to developing a thorough and well-informed product. A strong, participatory effort will increase the opportunities for stakeholders to voice concerns, assist in identifying issues of equity, increase the transparency of the project, “ground truth” the findings, increase stakeholder support for the finalized HIA product, and enhance capacity during the stakeholder process. Additionally, stakeholder involvement will improve the public’s understanding of using HIA as a possible tool to bring health to the forefront of policy, project, and program development.

As noted in previous sections, there are different levels of community engagement which depend on a variety of factors. When selecting a community engagement approach, it is important to identify one that will enhance the assessment (in content and capacity) without hindering the feasibility of its completion.

The following section provides some tools for you that will enhance the levels of community engagement and the feasibility of the HIA completion. Moreover, this section will highlight the variety of participation efforts that could be used during the assessment portion of the Health Impact Assessment.
Utilizing Community Engagement to Create an Efficient HIA

The following subsections will provide insight on how to balance community engagement efforts with available resources, in order to increase both community involvement and HIA capacity.

Advisory Committee

The advisory committee (or steering committee) is a group that provides oversight throughout a health impact assessment. It can consist of a variety of stakeholders such as community organizations, public agencies, community representatives, experts/consultants, elected officials, and other stakeholders (i.e. unaffiliated residents and project proponents). The number and variety of stakeholders involved in the committee depends on the situation and should be based on what is necessary to thoroughly inform the process of expert opinions, stakeholder viewpoints, and general insight.

This committee is set up to provide guidance, insight, and transparency at every stage of the process. The committee is typically in place by the scoping step, although some or all of the members of the committee may also be involved in the screening decision.

Advisory Committee — Levels of Engagement

<table>
<thead>
<tr>
<th>Advisory Only</th>
<th>Full Engagement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minimal involve in the development of the HIA process</td>
<td>Responsibility to advise and develop each step of the HIA process</td>
</tr>
<tr>
<td>Main responsibility is to provide guidance regarding issues of uncertainty</td>
<td>Requires frequent meetings to decide on each step of the process</td>
</tr>
<tr>
<td>Infrequent meetings</td>
<td>High time commitment required</td>
</tr>
<tr>
<td>Members are contacted when advice is needed.</td>
<td>Participation in research, community engagement, and all other efforts</td>
</tr>
<tr>
<td>Minimal to no participation in research, community engagement or other efforts</td>
<td>Requires minimal time commitment from members</td>
</tr>
</tbody>
</table>
Comprehensive HIAs may have steering committees that are deeply engaged at every step of the process, providing the extra capacity needed to tackle a very complex and resource-intensive proposal. Rapid HIAs have fewer resources, smaller scopes, and less time. For these you want to balance the benefits of engaging an advisory committee with the resources it takes to do so. The table on your right gives examples tasks that an advisory committee might assume during a rapid HIA. It’s worth prioritizing an advisory group even in a rapid HIA because the group can ground-truth findings, share local expertise, and lend credibility to the HIA.

When developing a list of potential advisory members, be as representative as possible: try to include decision-makers, people who represent conflicting viewpoints, and representation from groups who may be disproportionately impacted. In very rapid projects, the advisory group might be the only outreach done during the HIA; this makes the representative nature of the committee makeup even more important.

**Examples of rapid HIA Advisory Committee responsibilities**

<table>
<thead>
<tr>
<th>Stage of HIA</th>
<th>Advisory</th>
</tr>
</thead>
</table>
| Screening    | • Identify criteria for the selection of an HIA project  
• Judge strength of evidence |
| Scoping      | • Prioritize research questions for HIA  
• Establish timelines and boundaries |
| Assessment   | • Identify evidence-based recommendations from findings  
• Advise on reliability of potential evidence |
| Reporting    | • Review/Edit final document  
• Prepare comments for regulatory process |
| Monitoring   | • Review any developed monitoring documentation |

**HIA Lessons Learned**

Take the time early on in engaging the advisory committee to be explicit about their roles and responsibilities. Being clear upfront will help the committee prioritize necessary work, and will help prevent complications and misunderstandings later on in the HIA. Getting advisory committee buy-in on scope can be especially important for assessments on highly political or controversial issues.
Sample Meeting Agendas

When preparing an advisory committee meeting, there are a variety of different items that can be placed on the meeting’s agenda depending on the engagement level of the advisory committee. Figure 8 below displays this variety. For an advisory committee that is slated to be solely an advisory board, meetings should be short, occasional, and used primarily as a chance to update or receive approval for predetermined HIA approaches. Meetings for fully engaged advisory committees, on the other hand, tend to be longer meetings that are focused on developing each stage of the HIA.

The following pages present meeting agendas that provide examples for advisory and intermediate levels of Advisory Committee engagement.

<table>
<thead>
<tr>
<th>Advisory Committee — Range of Meeting Agendas</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Advisory</strong></td>
</tr>
<tr>
<td>- Topics are briefly discussed</td>
</tr>
<tr>
<td>- Updating the committee on process and actions</td>
</tr>
<tr>
<td>- Asking the committee for Approval of pieces developed by the HIA team</td>
</tr>
<tr>
<td>- Brainstorming &amp; advice are selective parts of the meeting</td>
</tr>
<tr>
<td>- Meetings are held occasionally</td>
</tr>
<tr>
<td>- Meetings are usually short (approx. 2 hours)</td>
</tr>
<tr>
<td>- More for updating the committee</td>
</tr>
<tr>
<td>- Minimal HIA development</td>
</tr>
</tbody>
</table>
**Meeting goals**

- Explain the benefits of HIA, and its use on related policies, plans, or programs
- Review & discuss potential health impacts of the identified policy, plan, or program
- Receive approval & advice for scope of HIA
- Receive approval & advice for priority areas for assessment
- Discuss desired information and formats for communicating results
- Manage expectations for the HIA
- Set up participants as resources for assessment
- Give an overview of the timeline

<table>
<thead>
<tr>
<th>Time</th>
<th>Activity</th>
<th>Presenter</th>
</tr>
</thead>
<tbody>
<tr>
<td>9:00</td>
<td>Welcome and Introduction to Day</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Statement of OHA’s commitment to HIA, the strategic benefits of partnering</td>
<td></td>
</tr>
<tr>
<td></td>
<td>with different agencies on the HIA, recognize importance of participation,</td>
<td></td>
</tr>
<tr>
<td></td>
<td>introduce to HIA program staff, outline of the day’s events, manage</td>
<td></td>
</tr>
<tr>
<td></td>
<td>expectations</td>
<td></td>
</tr>
<tr>
<td>9:25</td>
<td>Introduction to HIA and the identified policy, project, or plan</td>
<td></td>
</tr>
<tr>
<td>9:45</td>
<td>Presentation of Scope</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Receive committee advice and approval for predetermined scope</td>
<td></td>
</tr>
<tr>
<td>10:15</td>
<td>Presentation of Assessment Options</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Receive committee advice on priority areas for assessment</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Receive committee approval for established assessment approach</td>
<td></td>
</tr>
<tr>
<td>10:45</td>
<td>Presentation of Reporting Options</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Receive committee approval for established reporting approach</td>
<td></td>
</tr>
<tr>
<td>10:55</td>
<td>Next steps, closing</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Thank participants</td>
<td></td>
</tr>
<tr>
<td></td>
<td>What to expect from HIA Team: communications, engagement (email updates,</td>
<td></td>
</tr>
<tr>
<td></td>
<td>individuals calls for specific assistance, a draft of findings and</td>
<td></td>
</tr>
<tr>
<td></td>
<td>recommendations for review NOT APPROVAL in email box)</td>
<td></td>
</tr>
</tbody>
</table>
Meeting goals

- Explain the benefits of HIA, and its use on related policies, plans, or programs
- Review & discuss potential health impacts of the identified policy, plan, or program
- Determine priority areas for assessment
- Determine desired information and formats for communicating results
- Manage expectations for the HIA
- Set up participants as resources for assessment
- Give an overview of the timeline

<table>
<thead>
<tr>
<th>Time</th>
<th>Activity</th>
<th>Presenter</th>
</tr>
</thead>
</table>
| 8:30  | Welcome
   Statement of OHA’s commitment to HIA, the strategic benefits of partnering with different agencies on the HIA, recognize importance of participation |           |
| 8:30  | Introduction to the day
   Welcome, introduce to HIA program staff, outline of the day’s events, manage expectations |           |
| 8:45  | Introduction to HIA and the identified policy, project, or plan         |           |
| 9:05  | Framework for the HIA:
   Present assessment options, manage expectations                           |           |
| 10:00 | Break                                                                   |           |
| 10:10 | Scoping activity
   Break participants into 4 groups
   Present Scoping
   Begin activity in small groups (10:30 small group activity)         |           |
| 11:30 | Lunch                                                                    |           |
| 12:30 | Prioritization of assessment areas
   Ask individuals to share their priorities for the assessment
   Where would you like more clarity/information?
   What are the most critical links to investigate?
   Which vulnerable populations are you most concerned about? |           |
| 1:30  | What information would be most useful to decision makers?               |           |
| 1:50  | Next steps, closing
   Thank participants
   Manage expectations
   What to expect from HIA Team: communications, engagement (email updates, individuals calls for specific assistance, a draft of findings and recommendations for review NOT APPROVAL in email box) |           |
Assessment

Assessment 101

The assessment stage of the HIA is where research is conducted to estimate or assess the health impacts that were identified during the scoping stage. The assessment findings should guide and support the recommendations that you will develop in later stages of the HIA process. The range of assessment approaches are outlined below. Note that even the most comprehensive HIA may not use all of the assessment methods listed here.

<table>
<thead>
<tr>
<th>Rapid</th>
<th>Comprehensive</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1) Existing Conditions Profile</strong></td>
<td><strong>1) Existing Conditions Profile</strong></td>
</tr>
<tr>
<td>- Literature review</td>
<td>- Extensive literature review</td>
</tr>
<tr>
<td>- Empirical Literature</td>
<td>- Empirical Literature</td>
</tr>
<tr>
<td>- Regulatory Standards</td>
<td>- Regulatory Standards</td>
</tr>
<tr>
<td>- Indicators</td>
<td>- Indicators</td>
</tr>
<tr>
<td>- Little to no public participation</td>
<td>- Extensive public participation</td>
</tr>
<tr>
<td>- Listening Sessions</td>
<td>- Listening Sessions</td>
</tr>
<tr>
<td>- Media review</td>
<td>- Surveys</td>
</tr>
<tr>
<td>- Little to no primary data gathering</td>
<td>- Focus Groups</td>
</tr>
<tr>
<td>- No use of specialized data gathering</td>
<td>- Some to extensive primary data gathering</td>
</tr>
<tr>
<td></td>
<td>- Use of specialized data gathering tools</td>
</tr>
</tbody>
</table>

**Potential Impacts Analysis**

- Primarily based on peer-reviewed evidence and expert insight

- Analysis based on:
  - Peer-reviewed evidence
  - Primary data
  - Expert insight
The assessment stage is typically broken into two parts:

- Creation of an existing health conditions profile.
- Analysis of the potential impacts of the proposal on the health outcomes and determinants identified during scoping.

Creating an Existing Conditions Profile

An Existing Conditions profile is a compilation of available data that details the health and social conditions of the community that will be or could be impacted by the proposed project, policy, or program. In the Existing Conditions section of the final HIA report, OHA will expect to see:

1) A general overview of the community (location, demographic data, etc.)

2) Population health status and vulnerabilities

3) Inequities in health outcomes

4) An overview of other existing conditions relevant to the assessment

Sources for local health and demographic information include the following (not exhaustive):

- Counties either have existing county health profiles or they are in the process of completing them as part of their accreditation process.
- Each local public health authority has to submit an annual plan to OHA. These plans usually have county-specific statistics, data and information. You can find them here: [http://public.health.oregon.gov/ProviderPartnerResources/LocalHealthDepartmentResources/Pages/lhd-annual-plan.aspx](http://public.health.oregon.gov/ProviderPartnerResources/LocalHealthDepartmentResources/Pages/lhd-annual-plan.aspx)
- The Oregon Public Health Division has compiled some county-specific data and reports here: [http://public.health.oregon.gov/DataStatistics/Pages/index.aspx](http://public.health.oregon.gov/DataStatistics/Pages/index.aspx)
- The [Northwest Portland Area Indian Health Board](http://public.health.oregon.gov/DataStatistics/Pages/index.aspx) may have data and resources for tribal communities in the Northwest.
- Other resources are available at the end of this section.
Creating an Existing Conditions Profile

The Existing Conditions profile should include information relevant to the HIA assessment questions and purpose. If the HIA is intended to inform active transportation policies (like Washington County’s Bicycle and Pedestrian Facility Design HIA), Existing Conditions profiles should include information about biking and walking in the community. It could also include information such as bike riding rates by population, accident rates for the county, and information about the most dangerous roads and intersections in the county.

Documenting impacted populations

If the HIA is centered on a specific geographic area or a specific segment of the population, the Existing Conditions profile should include information specific to that group. That information could include:

- Lists of local schools, housing communities, and/or businesses in the area;
- Maps from census.gov, Oregon Environmental Public Health Tracking, or the county’s health department and/or planning department;
- Profiles of vulnerable members of the impacted community, including any health inequities you identify.

HIAs and Health Equity

A health equity perspective means recognizing that different individuals and communities may need different resources to achieve similar health outcomes. Health starts in homes, schools, jobs, churches, and neighborhoods. We can address many health inequities by considering the unintended public health impacts of decisions that affect our neighborhoods. HIA can help promote health and avoid unintended consequences by ensuring that health for all community members is considered in major decisions. Equity is a core value of HIA practice.
Resources for documenting vulnerable populations and health equity

- Washington County opportunity mapping project: [http://www.co.washington.or.us/CommunityDevelopment/Planning/consolidated-plan-2010-2015-opportunity-maps.cfm](http://www.co.washington.or.us/CommunityDevelopment/Planning/consolidated-plan-2010-2015-opportunity-maps.cfm)
- Northwest Portland Area Indian Health Board (serves the whole state of Oregon): [http://www.npaihb.org/](http://www.npaihb.org/)
- Additional resources available from Oregon Health Authority

Example of a map obtained through Oregon EPHT web portal:

Source: Oregon Health Authority, Environmental Public Health Tracking report: DMV records are valuable for obesity surveillance in Oregon, September 2012
Conducting an impact analysis

An Impact Analysis synthesizes evidence-based research findings (epidemiological evidence, empirical research, quantitative forecasting, etc), community concerns, and baseline conditions. This is a way to predict the potential impacts that could result from a project, plan, or policy. An impact analysis will predict the direction, magnitude, and likelihood of potential health impacts, and determine if some people will be affected more or less than others.

Depending on the proposal under review, impacts can have a range of different variables. Thus, when creating an Impact Analysis we suggest you create categories for each of the identified impacts and base them on the following factors:

- Duration of impact (i.e. long-term or short-term)
- Stage of impact (will different impacts happen at different stages of the proposal?)
- Nature of impacts (i.e. direct or indirect)
- Geographical variation of impact (Is the impact localized to a specific area?)
- Severity of impact (impacts that can be easily managed vs. impacts that are irreversible or potentially fatal)
- Magnitude of impact (impacts few people vs. impacts many people)
- Likelihood of impact (likely that the impacts will occur as a result of the proposal vs. unlikely that the impacts will occur as a result of the proposal)
- Distribution of impact (do the impacts affect a specific community group? i.e. low-income residents, children, etc.)
- Strength of evidence

**Rapid HIA lessons learned**

Rapid assessments are most successful when they are focused on specific research questions and use a limited number of assessment methods. Pick just one or two.
<table>
<thead>
<tr>
<th>Recommendation</th>
<th>Mitigate air quality impacts with plantings &amp; barriers</th>
<th>Implement physical activity programs among impacted groups</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nature of differential impacts</td>
<td>Fail</td>
<td>No</td>
</tr>
<tr>
<td>Avoided</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Pos/Neg</td>
<td>Neg</td>
<td>N/A</td>
</tr>
<tr>
<td>Impacted Groups</td>
<td>Youth, nearby neighborhoods</td>
<td>Low income, women</td>
</tr>
<tr>
<td>Likelihood of impact</td>
<td>Very likely</td>
<td>Likely</td>
</tr>
<tr>
<td>Time frame of impact</td>
<td>Up to 8 days/year</td>
<td>Permanent</td>
</tr>
<tr>
<td>Value of impact</td>
<td>Neg</td>
<td>Neg</td>
</tr>
<tr>
<td>Severity of information</td>
<td>Moderate</td>
<td>Very Strong</td>
</tr>
<tr>
<td>Source/Type of info</td>
<td>EPA model</td>
<td>Literature</td>
</tr>
<tr>
<td>Relevant health determinants</td>
<td>Physical inactivity</td>
<td>Traffic crashes</td>
</tr>
<tr>
<td></td>
<td>Highway expansion</td>
<td></td>
</tr>
</tbody>
</table>

Conducting an impact analysis
More sources to consider in your assessment:

- **Regulatory standards and benchmarks** — Regulatory criteria can be used to determine if the policy, plan or project meets regulatory standards. Some examples of regulatory criteria include environmental quality standards for air, drinking water and soil; OSHA’s workplace standards for worker safety; or building code standards for housing safety.

  *Example of regulatory criteria:* “National Parks and Recreation Association recommends 10 acres of open space per 1,000 population in cities.”

- **Health, environmental and social indicators** — An indicator is a defined aspect of a population that can be measured, tracked over time, or compared to another population or standard.

  *Examples of indicators:* The number of pedestrian deaths at an intersection; the percentage of a population living below poverty; the rate of hospital visits for asthma in a year.

- **Community expertise** — Typically identified through the use of focus groups, surveys and interviews, community expertise is the use of community knowledge to identify local health and social conditions.

  *Examples of community expertise:* “The lack of sidewalks prevents me from walking around my neighborhood. I would rather drive down the block than walk in the street.”

- **Specialized data collection tools** — These tools may include population surveys, statistical models, walkability/bikability assessments, or measurements of air quality or noise levels. These tools tend to be used primarily in comprehensive HIAs.

- **GIS Mapping** — Maps, such as the map on the previous page can be useful for understanding impacts of different scenarios, and also serve as an easy communication and reporting tool.
Conducting a literature Review

- A literature review is the most common assessment tool used in rapid HIAs.
- **Empirical literature**— Empirical literature (includes peer-reviewed and grey or unpublished literature) is a great source of evidence-based research and can help make the link between health and a variety of determinants.
- Example of Empirical literature data: “People who take public transport get, on average, 19 minutes of exercise per day.”

In OHA’s Strategic HIA on Wind Energy Development in Oregon, the researchers reviewed peer-reviewed publications, government documents, and publications by community and industry groups. The researchers used the following hierarchy of evidence when evaluating these sources. The steering committee formally agreed to this hierarchy, and the hierarchy was an important communication tool that helped explain how materials were used, and how they were weighted.

**Hierarchy of evidence used in Wind Energy Strategic HIA.**

<table>
<thead>
<tr>
<th>Weight</th>
<th>Study Type</th>
<th>Measurements</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>More</td>
<td>Population-based</td>
<td>Measured</td>
<td>Peer-review Journals</td>
</tr>
<tr>
<td></td>
<td>Risk assessment</td>
<td>Validated model</td>
<td>Public health/medical reports</td>
</tr>
<tr>
<td></td>
<td>Case series/ case reports</td>
<td>Non-validated model</td>
<td>Publications by public health authorities</td>
</tr>
<tr>
<td></td>
<td>Animal studies</td>
<td></td>
<td>Publications by other groups (Industry, community members)</td>
</tr>
<tr>
<td>Less</td>
<td></td>
<td></td>
<td>Other: Web sites, news articles, opinions, etc.</td>
</tr>
</tbody>
</table>

The chart on the next page shows how OHA’s Climate Smart Scenarios HIA assessment team used a ranking system to describe the strength of evidence between policies and health outcomes.
## Quality of Evidence Chart

<table>
<thead>
<tr>
<th>Policies (existing conditions - most ambitious proposed change)</th>
<th>Physical activity</th>
<th>Air pollution</th>
<th>Crash Injury/Fatality</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Community design</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mixed use/complete neighborhoods</td>
<td>****</td>
<td>*</td>
<td>**</td>
</tr>
<tr>
<td>Bicycle mode share (2% - 30%)</td>
<td>****</td>
<td>**</td>
<td>**</td>
</tr>
<tr>
<td>Transit service level (2010 level - 4x RTP level)</td>
<td>***</td>
<td>**</td>
<td>**</td>
</tr>
<tr>
<td>Workers/non-work trips pay for parking (13%/8% - 30%/30%)</td>
<td>*</td>
<td>**</td>
<td>*</td>
</tr>
<tr>
<td>Average daily parking fee ($5 - $7.25)</td>
<td>*</td>
<td>**</td>
<td>*</td>
</tr>
<tr>
<td><strong>Pricing</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pay as you drive insurance (0% - 100%)</td>
<td>**</td>
<td>**</td>
<td>**</td>
</tr>
<tr>
<td>Gas tax ($0.42 - $0.18/cost per gallon^)</td>
<td>**</td>
<td>**</td>
<td>**</td>
</tr>
<tr>
<td>Road use fee ($0 - $0.03/cost per mile)</td>
<td>*</td>
<td>*</td>
<td>*</td>
</tr>
<tr>
<td>Carbon emissions fee ($0 - $50/cost per ton)</td>
<td>*</td>
<td>**</td>
<td>**</td>
</tr>
<tr>
<td><strong>Incentives</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Households participating in eco-driving (0% - 40%)</td>
<td>N</td>
<td>*</td>
<td>*</td>
</tr>
<tr>
<td>Households participating in marketing programs (9% - 65%)</td>
<td>*</td>
<td>*</td>
<td>*</td>
</tr>
<tr>
<td>Workers in employer-based commuter programs (20% - 40%)</td>
<td>*</td>
<td>*</td>
<td>*</td>
</tr>
<tr>
<td>Car-sharing in high density areas (1 - 2 members/100 people)</td>
<td>*</td>
<td>*</td>
<td>*</td>
</tr>
<tr>
<td>Car-sharing in medium density areas (1 - 2 members/200 people)</td>
<td>*</td>
<td>*</td>
<td>*</td>
</tr>
<tr>
<td><strong>Fleet</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fleet mix (57% auto/43% light truck and SUV - 71%/29%)</td>
<td>N</td>
<td>*</td>
<td>*</td>
</tr>
<tr>
<td>Fleet turnover rate (10 years - 8 years)</td>
<td>N</td>
<td>*</td>
<td>*</td>
</tr>
<tr>
<td><strong>Technology</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fuel economy (29.2 mpg auto/20.9 mpg light truck/SUV - 68.5/47.7)</td>
<td>N</td>
<td>*</td>
<td>N</td>
</tr>
<tr>
<td>Carbon intensity of fuels (90 g - 72 g CO2e/megajoule)</td>
<td>N</td>
<td>*</td>
<td>N</td>
</tr>
<tr>
<td>Light-duty vehicles that are electric (0% - 8% auto/2% light truck and SUV)</td>
<td>N</td>
<td>*</td>
<td>N</td>
</tr>
</tbody>
</table>

**Legend**
- **** 10+ strong studies
- *** 5-9 strong studies
- ** 5 or more studies of weak or moderate quality, or studies have mixed results
- * <5 studies and policy-impact link consistent with public health principles
- N = No evidence found
Community Engagement during the Assessment Stage

Community engagement can be an important source of information for an HIA’s assessment. Community engagement can help to “ground truth” scientific literature, create buy-in for using HIA findings, solicit powerful quotes for the final report, identify potential spokespeople for reporting HIA findings, and potentially identify information that a tabletop research effort would have overlooked.

The following are suggestions for engagement tools you can use during the assessment stage of the HIA process:

- Surveys focused on affected populations
- Focus groups held with affected populations
- Interviews with key stakeholders
- Data requests from organizations/agencies
- Interviews with authors of reports or articles
- Review of public testimony

It is essential to understand community concerns, even when conducting an HIA on an extremely compressed timeline. At a minimum, be sure to survey local media/internet coverage to do an *issue identification*. Sources to consider:

- Local papers, including editorials and letters to the editor
- Websites set up about the issue
- Minutes from meetings about the proposal
- HIA advisory committee

*Rapid HIA Lessons Learned*

One of the biggest challenges with community engagement in HIA is managing expectations. When reaching out to stakeholders, make sure to be clear about how their input will be used, and about the power the HIA itself has (or does not have) to implement changes to the proposal.
Assessment Research Resources

Data Resources for Creating an Existing Conditions Profile

- U.S. Census: [http://factfinder2.census.gov](http://factfinder2.census.gov)
  - American Community Survey (ACS): [http://www.census.gov/acs](http://www.census.gov/acs)
- County Health Rankings: [http://www.countyhealthrankings.org/](http://www.countyhealthrankings.org/)
- Social Explorer: [http://www.socialexplorer.com](http://www.socialexplorer.com)
- Local Planning Agencies:
  - Land use data
  - Transit data
  - Environmental data
  - Housing data
- State Planning Agencies:
  - Oregon Department of Transportation (ODOT): [http://cms.oregon.gov/odot](http://cms.oregon.gov/odot)
- Oregon Department of Education (ODE): [http://www.ode.state.or.us](http://www.ode.state.or.us)
- County Public Health Departments
- Oregon-based non-profit organizations
  - Upstream Public Health
  - Oregon Public Health Institute
  - EcoTrust
- Department of Environmental Quality (DEQ): [http://cms.oregon.gov/deq](http://cms.oregon.gov/deq)
- Environmental Protection Agency (EPA): [http://www.epa.gov/aboutepa/states/or.html](http://www.epa.gov/aboutepa/states/or.html)
- Oregon Health Authority: [www.healthoregon.org/hia](http://www.healthoregon.org/hia) and [epht.oregon.gov](http://epht.oregon.gov)
Data Resources for Analyzing Potential Impact
(in addition to the resources mentioned on the previous page)

- **Peer-Reviewed Journal Articles**

- **Previous Health Impact Assessments**
  - UCLA’s HIA Clearinghouse: [http://www.ph.ucla.edu/hs/hiaclic/](http://www.ph.ucla.edu/hs/hiaclic/)
  - Health Impact Project: [http://www.healthimpactproject.org/resources#reports](http://www.healthimpactproject.org/resources#reports)

- **Local Academic Institutions**
  - Faculty opinion/advice
  - Academic library database/access

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In the assessment section of the final report, include:

- A description of each specific health issue assessed
- A description of data sources and analytic methods used in the assessment
- An analysis based on the review of best available scientific evidence
- A description of the impact (or potential impact) on vulnerable populations, and/or populations with inequitable access or disproportionate impact
- A description of the results, uncertainties and limitations (e.g., limits in access to data or resources to answer the question)
Recommendations and Reporting

Recommendations
Recommendations should flow directly from the evidence found during the assessment, and they should respond to the questions developed during scoping. Recommendations can be general or very specific depending on the proposal and the scope of the HIA.

- Sample recommendation from Hood River County’s Barrett Park HIA: “To take into consideration the desired use by the entire community, particularly vulnerable populations, while regarding allowable uses as permitted by planning guidelines and grant requirements.”
- Sample recommendation from Deschutes County’s Tumalo Community Plan HIA: “Recommended change to Policy #11: Improve crossing conditions across Hwy. 20 by providing a grade separated crossing to support safe access to recreation and community services for all users.”

Reporting Overview
Reporting is the process of communicating the HIA procedure, methods, findings, and recommendations to the general public, stakeholders, and decision-makers. Typically, the reporting phase of an HIA involves developing and distributing a written final report. The ultimate goal of the report is to widely distribute a comprehensive summary of the HIA, in order to inform the proposal’s decision-making process.

Multiple documents may be necessary to reach all audiences. Legislators are unlikely to read more than a legislative summary. Community members may need a report that speaks clearly with no jargon. If a group of key stakeholders are predominantly non-English speakers, or who do not read English, you may need to translate your documents, or ensure that a translator is available at an open meeting to communicate findings and recommendations, as well as answer any questions community members may have.
OHA’s Rapid HIA Report - Sample Outline

**Executive Summary (1-2 pages)**
- Short summary of findings and recommendations in the form of a fact sheet or executive summary
- A line crediting all project funders

**Introduction (1-2 pages)**
- Context for the HIA
- Introduction of key partners
- Introduction of the proposal, including:
  1) its significance
  2) the decision that the HIA will impact
  3) the value an HIA adds to the conversation
- Introduction of each section of the report

**Documentation of baseline conditions (2-5 pages)**
- A general overview of the community
- Population health vulnerabilities
- Inequities in health outcomes
- An overview of other existing conditions relevant to the assessment

**Assessment (2-5 pages)**
- A description of each specific health issue assessed
- A description of data sources and analytic methods used in the assessment
- An analysis based on the review of best available scientific evidence
- A description of the impact (or potential impact) on populations that are vulnerable or have inequitable access, or face a disproportionate impact
- A description of the results and limitations, such as limits in access to data or resources to answer the question
**Recommendations (1-3 pages, can be included in the conclusion)**

- Specific recommended actions for maximizing positive and minimizing negative impacts
- Description of how recommendations are supported by evidence
- If selecting between two or more alternatives, describe any ranking or prioritization system used

**Conclusion (1-3 pages)**

- Summarize key findings and recommendations
- Describe any additional outcomes from the HIA process
- Evaluation
  1) Compare the final report with the HIA process to date and the steering committee’s goals
  2) Describe the progress toward goals
  3) Describe evaluation/review plan (if any)
- Include a monitoring plan (if any)

**References**

Bibliography, containing all reference materials used in the assessment

**Appendices**

This includes any technical information needed to support the assessment. In depth information about HIA methods could be included as a practitioners’ appendix.

**Practitioner resource**

Several Oregon County health departments have produced HIA reports, available at [www.healthoregon.org/hia](http://www.healthoregon.org/hia). The Centers for Disease Control and Prevention recommends the Tumalo HIA as an example of an outstanding HIA report. Additional HIA reports are available at [www.healthimpactproject.org/hia/us](http://www.healthimpactproject.org/hia/us)
HIA Process Information to Include in the Report

_Screening: A detailed section answering each of the following questions:_

1) Why was this HIA chosen?
2) Who was involved in the screening process?
3) Who is sponsoring the HIA?
4) Who is funding the HIA?
5) A description of public engagement, if any, used in this process

_Scoping_
- A description of the HIA goals
- A description of the scope of the assessment
- An overview of how assessment topics were chosen
- An overview of participants and their roles and responsibilities:
  1) Who was involved in the steering committee?
  2) What was their role?
  3) Who was on the team conducting the assessment and writing the report?
  4) Who are the other participants, if any?
  5) What were their roles/contributions?
- A description of public engagement/local knowledge used in this phase
- Any other information about the scoping process that might be important to share

_Review process_
- The report should be reviewed by your organization’s leadership and key stakeholders (at a minimum), and by community members if possible (e.g., through a public comment process)
- Revise report to incorporate any substantive comments
- Document approval of the final report by the steering committee
Practitioners’ Appendix

A practitioners’ appendix is intended for colleagues in the field of HIA and external evaluators seeking in-depth information about the process and methods used for an HIA. The appendix describes how an HIA meets the Minimum Elements of HIA established by the North American HIA Practice Standards Working Group of the Society of Practitioners of HIA (SOPHIA), and provides process information that may be unnecessary for most readers. The appendix can include some or all of the following information. A sample Practitioners’ Appendix can be found in the Climate Smart Strategy HIA www.healthoregon.org/hia.

- Title
- Timeline
- Location
- Funding
- Sector(s) assessed in the HIA
- Decision context
- Scope
- Health pathways
- Sources of evidence
- Data types and sources
- Data holes identified
- Stakeholder involvement
- Overview of the report review process
- Communication plan
- Evaluation plan
- Monitoring plan
HIAs establish goals during the scoping phase (see page 16). Monitoring and evaluation allows you to evaluate whether your HIA achieved its stated goals. Evaluations help you and other stakeholders judge the success of an HIA, and they also answer questions that help shape future HIAs. For example, is there evidence that decision-makers used health information in their final decision? Were the recommendations followed when the project was implemented? Did your HIA have other impacts, such as strengthened relationships or new data sets? Continued monitoring of your HIA and the project, program, or policy can help answer some of these questions.

Three kinds of evaluation are typically discussed in the HIA literature:

Process evaluation reviews aspects of the HIA process such as transparency, timeliness, inclusion, and adherence to established standards.

Impact evaluation assesses how the HIA changed or informed a decision making process, and whether the HIA met its stated objectives established in the scoping process.

Outcome evaluation focuses on how health indicators change following a decision.

Most HIA evaluations focus on process and impact evaluations, as outcome evaluations are considered methodologically challenging, and often require a long time-frame in order for health changes to present themselves.
A wide range of tools and strategies are available for evaluating the process and impact of your HIA. Some of these include:

- Meeting evaluations, where participants brainstorm successes and opportunities for improvement
- Online surveys at the end of the project
- Key informant interviews
- Document reviews (checking adopted policies against your recommendations)

Recent national reviews of HIAs have primarily employed document reviews and key informant interviews. With small groups of stakeholders (up to about 15) you may find the most informative approach is to engage in a dialogue with HIA participants and decision-makers. Semi-structured key informant interviews (a series of open-ended questions with follow-ups) or focus groups are appropriate methods to accomplish this. In some cases, particularly if you expect that participants would be reluctant to give candid feedback, it may be beneficial to request help from an impartial third party.

Most project funding stops when the HIA report is completed, and limited resources can make monitoring and evaluation especially challenging. Match your evaluation plan to your available resources, and the goals of your project evaluation. Surveys, interviews, and document reviews can be accomplished on relatively short timelines with modest time commitments.
Sample Advisory Committee Survey Questions

- What was your familiarity with the HIA process and implementation before serving on the Advisory Committee? (Choose one)
- After serving on the Advisory Committee, what is your familiarity with HIA? (choose one)
- Several goals were developed for the HIA. As far as you know to date, which of these goals (displayed below) have been met by the HIA? (Check all that apply)
- Do you feel the HIA Advisory Committee included all relevant stakeholders?
- What did you contribute to the HIA as a member of the Advisory Committee? (Check all that apply)
- What benefits have you gained by participating on the HIA Advisory Committee? (Check all that apply)
- Do you know of any impact this HIA has already had in your work?
- Would you consider teaming up with local health departments to perform future HIAs?

HIA Evaluation Resources

World Health Organization’s *Evaluating health impact assessment*

Evaluation of HIA: Clark County Bicycle and Pedestrian Master Plan
Additional HIA Resources

The following 5 key resources will assist in further understanding and developing a Health Impact Assessment:

http://www.humanimpact.org/component/jdownloads/finish/11/139/0

http://www.nap.edu/catalog.php?record_id=13229


http://www.cdc.gov/healthyplaces/hia.htm

UCLA Health Impact Assessment Clearing House Learning and Information Center.
http://www.ph.ucla.edu/hs/hiaclic/
Quick Overview of the History of HIA in Oregon

2007 — Health Impact Assessments (HIAs) began in Oregon with the development of the Portland Health Impact Assessment workgroup. This workgroup was convened within the greater Portland area to understand the role of an HIA in evaluating the potential impact that social, economic, and environmental policies, programs, and projects have on human health.

Comprised of representatives from academia, local non-profits, public health institutions, and state agencies, the Portland Health Impact Assessment workgroup established that HIA is a valuable tool that can assist in developing an environment where health is prioritized by all in order to create healthy, vibrant communities.

2008 — The Portland Health Impact Assessment workgroup selected the Columbia River Crossing (CRC) bridge and highway improvement project as the subject of the first HIA in the state of Oregon.

The HIA findings were intended to inform design decisions regarding the CRC by underscoring the potential danger that some of the bridge/highway proposal designs could have on human health.

2009 — After the completion of the CRC Health Impact Assessment two more HIAs were developed:

1) **Upstream Public Health**: Policies Reducing Vehicle Miles Traveled for Metropolitan Areas HIA

2) **Clark County Health Department**: Highway 99 Sub-Area Plan HIA
2010 — The Oregon Health Authority received funding from the Association of State and Territorial Health Officials (ASTHO) to sponsor the completion of two countywide HIAs (Deschutes and Benton counties) and one statewide HIA on biomass boilers. In addition to these three HIAs, there were three more independent HIAs established in Oregon:

1) Clark County: Pedestrian/Bike Master Plan for
2) Clark County Public Health: Salmon Creek Sub-Area Plan HIA
3) Upstream Public Health: Eugene Climate and Energy Action Plan HIA

2011 — The Oregon Health Authority received funding from the Center for Disease Control and Protection (CDC) to sponsor the completion of two countywide HIAs (Hood River and Crook counties) and one statewide HIA on Wind Energy. In addition to these three HIAs, there were four more independent HIAs established in Oregon:

1) Upstream Public Health: Farm to School HIA
2) Oregon Public Health Institute: Lake Oswego to Portland Transit Study HIA
3) Oregon Public Health Institute: East Portland/SE 122nd Neighborhood Study HIA
4) Metro Regional Government: Health Benefits of the Intertwine HIA

2012 — The Oregon Health Authority received funding to sponsor two more countywide HIAs and one more statewide HIA. In addition to these three HIAs, there were two more HIAs established in Oregon in 2012:

1) Metro Region Government: Climate Smart Communities HIA
2) Oregon Public Health Institute: City of Portland Rental Housing Inspections Program HIA

Over a five year timespan, the State of Oregon has become a leader in Health Impact Assessment with its completion of over 20 HIAs.
Sample HIA projects

Rapid HIA Projects

Doing an HIA is an excellent way to learn how to conduct an HIA; but that doesn’t mean you have to jump in with no idea of where you’ll land. You can learn from other people’s projects by reading HIA reports.

The Society of Practitioners of Health Impact Assessment (SOPHIA) has an excellent website with a lot of useful resources. One of their best sections is called Model HIA Reports, where you can view a short list of excellent HIA reports: http://hiasociety.org/?page_id=57

The Health Impact Project (a joint project of the Robert Wood Johnson Foundation and the Pew Charitable Trusts) has a map with almost every HIA project in the country. Their website is an excellent place to look for projects similar to yours to get an idea of how others have approached the issues, health concerns, and politics of similar decisions. They also have a few HIAs in the Case Studies section of their website where you can find a nice overview of a few projects: http://www.pewtrusts.org/en/projects/health-impact-project/health-impact-assessment/case-studies.

OHA’s HIA Program funds projects that are conducted by Oregon counties, which you can view on their website: www.healthoregon.org/hia.

The following pages contain project summaries from many HIAs—in Oregon and elsewhere.
Case Study #1:  
Rapid HIA — Comprehensive Growth Management Plan  
Vancouver, Washington — 2011  

Information Sourced from Clark County Public Health  

Screening —
Based on findings from an HIA conducted on the Bicycle and Pedestrian Master Plan during 2010, Clark County Public Health (CCPH) identified both strengths and areas of concern within the City of Vancouver.

Clark County, Vancouver is home to the largest and most concentrated populations affected by health disparities. These include racial and ethnic minorities and people of low socioeconomic status (SES).

With this information CCPH met with the City of Vancouver’s Long Range Planning Department to discuss ways to incorporate health concerns into planning. Both the City and CCPH agreed that an HIA on the City’s Plan update would be valuable. Subsequently, CCPH received a grant from the Northwest Health Foundation to fund the HIA work.

Scoping —
The primary decision assessed by this HIA was whether to adopt the set of modifications made to the existing comprehensive plan through the update process. The decision makers included the City’s Long-Range Planning Department and the Vancouver City Council.

The scoping process also clarified the following elements for the HIA: Potential Impacts, Boundaries of Analysis, Research, Vulnerable Subgroups, Distribution of Impacts, Roles, Standards, and Review & Dissemination.
Assessment and Recommendations —
The assessment portion of this HIA included baseline conditions identifying potential health impacts, and recommended strategies for implementing and updating the plan. Baseline conditions were reported for the city and its population as a whole, as well as for vulnerable sub-populations. Limitations, gaps in data, and uncertainties were explicitly noted. Assessment of project impacts was based on GIS analysis combined with relationships established in research literature.

The following five general areas of recommendations were supported by specific sub-recommendations:

- Recruit and Retain Healthy Retail
- Promote Opportunities to Grow Food in Home and Community Gardens
- Reduce the Availability of Unhealthy Food Options Relative to Healthy Food Options
- Promote Food Security
- Reduce Disparities in Food Access and Protect Vulnerable Populations

Recommendations were based on the findings from assessment and on the best available evidence from research literature.

Reporting and Monitoring —
This report and executive summary constituted the primary reporting activity related to this HIA. The report included a summary of findings and discussion of scientific evidence for the identified health impacts. The report was available for distribution and posted on the CCPH website.

Monitoring of health outcomes and changes in the determinants of health are taking place through routine assessments conducted by CCPH, most notably through the Community Assessment Planning, and Evaluation (CAPE) report.
Case Study #2

Rapid HIA — Jack London Gateway Project
Oakland, California—2011

Information Sourced from Human Impact Partners
http://www.humanimpact.org/doc-lib/finish/8/14

Screening —

Facilitated by Human Impact Partners (HIP), this HIA did not conduct a formal screening process; community interest and perceived links between the project and health were implicit screening criteria in this process.

East Bay Asian Local Development Corporation (EBALDC) is a non-profit developer well-respected for community-oriented projects in Oakland. In 2006, EBALDC proposed to build approximately 55 units of low-income, senior housing and an additional 14,000 feet of retail space in an under-utilized parking lot of the existing Jack London Gateway Shopping Plaza. The site is close to the junction of two interstate freeways (less than 400 feet from one and 1100 feet from the other). It is also approximately 1100 feet from the Port of Oakland. Air and noise pollution and safety emerged as primary concerns.

Scoping and Assessment —

In four meetings, held over three months, HIP worked with community stakeholders to select the project, engage EBALDC in discussions about project details, scope and prioritize health concerns associated with the project, identify supporting evidence using existing literature regarding prioritized impacts; develop mitigations to address identified health impacts; and write a letter to EBALDC and the Planning Commission regarding potential project impacts and mitigations.
Findings and Recommendations —

The HIA found that without mitigations, the project would lead to: 1) higher rates of chronic and acute respiratory illness and higher rates of morbidity from asthma due to traffic-related emissions—as compared to people living further from these roadways; 2) higher rates of chronic and acute respiratory illness and higher rates of morbidity from asthma as a result of poor indoor air quality caused by second-hand smoke; 3) chronic high noise levels that may result in annoyance, high blood pressure, and sleep loss; 4) high rates of stress and restricted activity outside the home because of fear of crime and physical injury; and 5) increased availability of health-promoting goods of services and, potentially, increased physical activity as a result of the availability of these new resources. The HIA made recommendations in each of these areas to mitigate potential negative impacts.

Reporting and Monitoring —

A letter to EBALDC summarized the findings from the analysis stage of the rapid HIA. Two members of the HIA Working Group testified before the Design Review Committee. Testimony indicated support for the project overall, but raised community concerns regarding health. As a result, the Design Review Committee approved the project, but asked EBALDC to work with the HIA Working Group to include mitigations for community health concerns.

The HIA working group engaged EBALDC around four identified areas of concern. As a result, EBALDC conducted the following actions:

- **Air Quality** - EBALDC installed a central ventilation system with air filters inside housing units and modified the design of the building by changing the balconies facing the freeway into bay windows. They also designed a ventilation system for the common spaces.
- **Noise** - EBALDC modified residential building design to orient entryways through a noise-buffered courtyard rather than near a freeway.
- **Safety** - EBALDC has been in discussions with the Neighborhood Crime Prevention Council about crime in the area and how to mitigate it.
Case Study #3

Transportation Policies in the Eugene Climate and Energy Action Plan (CEAP) Eugene, Oregon — 2010

Information Sourced from Upstream Public Health

Eugene's City Council asked staff to develop Eugene's first Community Climate and Energy Action Plan (CEAP) in an effort to reduce community-wide greenhouse gas emissions and fossil fuel use, and identify strategies that would help the community adapt to a changing climate and increasing fossil fuel prices.

Policies aimed at reducing greenhouse gas emission may lead to improvements in the health of Eugene's residents. While there is a growing body of research on the potential health implications of climate change, there are only few examples of analysis of the health impacts associated with climate change policy. This was the first HIA conducted on a local Climate Action Plan.

Screening —
Screening determined that adequate scientific evidence and sufficient resources were available to conduct the HIA. Additionally, staff determined that the HIA could inform the decision by the Eugene City Council to approve, modify, or reject a draft of the CEAP. Lastly, it was established that an informed discussion about the health impacts, particularly the health benefits, would be a valuable addition to the political discussion at the city council. Thus, the scoping verified the feasibility, timeliness, and relevance of the project.
Scoping —
The Eugene Office of Sustainability and Upstream Public Health jointly coordinated the scope definition process. The scope of analysis was then discussed with stakeholders. The resources available to do the analysis and the short timeline to influence the city council limited the scope of the analysis.

The HIA identified a subset of policies from the “Land use and Transportation” section of the CEAP that were likely to affect health. The HIA focused on the impact that objectives and policy actions would have on the health through changes in air pollution, physical activity, and collisions. Changes in noise levels, stress, household budgets and other areas would also have important health impacts, but analyzing those impacts was outside the scope of the HIA.

Assessment and Recommendations —
The HIA used existing conditions data from a variety of different stakeholders. For each set of policy actions, a literature review was carried out to find current research on the topic. For the following topic areas, more rigorous data/literature review searches were carried out: built environment and physical activity; build environment and air pollution; built environment and collisions; public transit and physical activity; promotion of active transportation; plug-in vehicles and air pollution, and biofuels and air pollution.

From the findings, seven general recommendations were developed: 1) Approve the Transportation and Land Use section of the CEAP, 2) Ensure that forms of active transit are measurably increased, 3) promote urban density while seeking to reduce the potential negative impacts of density, 4) invest in pedestrian and bicycle infrastructure, 5) invest in public transit that benefit low-income and other vulnerable communities, 6) integrate HIA practice into state level planning, and 7) develop a system to track injuries and fatalities by transit mode.

Housing decisions impact the leading causes of illness and death in Oregon. Health is more than genes and personal choices; the places we live, work, and play have a significant impact on our health. For example, homes with access to sidewalks and community destinations affect how much we walk. Homes with wide doorways can support aging in place. Homes with mold or woodstove heating can increase our risk for chronic diseases such as asthma. The field of public health calls these greater influences the ‘social and environmental determinants of health’. Housing decisions influence the leading causes of illness and death through their effects on the determinants of health.

THE RIGHT TOOL FOR THE JOB
Public health has many supportive tools available, including health data that supports decisions made on housing plans, programs, and projects. The Oregon Public Health Division can support the assessment of health in housing policies and programs by developing evaluation tools and performance measures, analyzing policies and programs, interpreting health data sets, and other general public health expertise.
Public health has many supportive tools available, including health data that supports decisions made on housing plans, programs, and projects. The Oregon Public Health Division can support the assessment of health in housing policies and programs by:

- Developing and applying modeling or evaluation tools
- Providing in-depth literature reviews and white-papers
- Analyzing policies and programs
- Estimating the cost of illness
- Selecting indicators for project selection criteria and performance measures
- Conducting HIAs of any size and rigor, from rapid to comprehensive
- Analyzing and interpreting health data sets

In 2013, Curry County conducted the Housing Stock Upgrade Initiative HIA to assess the potential health impacts of the Housing Stock Upgrade Initiative (HSUI), now called reHome. The HIA team reviewed existing conditions of manufactured housing and current health conditions of residents of Curry County, read relevant peer-reviewed literature, and conducted home site-visits and interviews with residents of manufactured homes. The HIA found that reHome has the potential to improve indoor air quality and home structural integrity as well as increase the potential for residents to stay in their homes as they age. reHome may have mixed implications for resident’s stress, because of the cost of repair or replacement as well as the potential for financial debt. With the new program, there is a potential for creating local jobs repairing and manufacturing homes to support family employment and its attending health benefits. More information about reHome, including before and after photos, can be found at reHomeOregon.org

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**Glide family gets renewed lease on life through new home**

GLIDE, OR — A family plagued by illness and poverty and forced to camp all summer got a piece of the American dream Wednesday. Organized by NeighborWorks Umpqua, workers delivered a three-bedroom, two-bath manufactured home to a rural piece of property on Standley Road southeast of Glide.

“My heart’s just beating. I’m so happy. To have a house is just amazing,” said 41-year-old Dawn Ebright, who will live in the home with her husband, William Bernard, and their three children. “My kids really deserve this. They have been through hell and back,” Dawn Ebright said.

Hood River is a rural county with a population of roughly 22,385. It is famous for its fruit production, which depends upon the region’s large Latino population of seasonal and migrant farm workers. More recently, tourist recreation has become increasingly important for the local economy due to its world-class outdoor sports venues for windsurfing, skiing, and kite-boarding, among other sports. The increasing number of visitors to Hood River impacts parks and recreational facilities, which serve both tourists and residents. As a result, there is a greater need for higher levels of recreational options and facilities (Hood River Valley Parks & Recreation District, 2010).

In 2007, the Hood River Valley Parks and Recreation District bought a 30-acre former commercial orchard property on Barrett Drive in Hood River, Oregon with the intention of developing it into land for recreational purposes. Concerns were raised regarding the redevelopment of orchard land that may have had chemical pesticides and heavy metals present. To properly assess the health tradeoffs of this park development, the Hood River County Health Department decided to conduct a Health Impact Assessment.

What is a Health Impact Assessment?

An HIA is a combination of procedures, methods and tools by which a policy, programme or project may be judged as to its potential effects on the health of a population.

Barrett Background

Hood River is a rural county with a population of roughly 22,385. It is famous for its fruit production, which depends upon the region’s large Latino population of seasonal and migrant farm workers. More recently, tourist recreation has become increasingly important for the local economy due to its world-class outdoor sports venues for windsurfing, skiing, and kite-boarding, among other sports. The increasing number of visitors to Hood River impacts parks and recreational facilities, which serve both tourists and residents. As a result, there is a greater need for higher levels of recreational options and facilities (Hood River Valley Parks & Recreation District, 2010).

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Scope and Methods

The scoping involved developing an HIA Committee to determine the HIA goals and objectives. Comprised of a diverse set of stakeholders such as the local health department; planning department; parks and recreation department; community-based organizations; county commissions and local academic institutions, the committee decided that the scope would be to determine potential benefits and risks of a park on the Barrett Property with open play fields, trails, and community gardens.

The HIA Committee completed an extensive literature review and fully reviewed the property’s land use designation and overall recreational use in Hood River County. Additionally, it took into consideration community interests through a variety of public engagement efforts.
Key Findings

Park development could address the following health-related needs in Hood River County:

1. **Chronic disease management and risk factors**
2. **Nutrition and food insecurity**
3. **Behavioral and social health**

The most important variables the HIA considered when recommending development of the Barrett Property included a review of the demographic population of potential users; the ways a park could address community health-related needs, and how health benefits could be maximized and potential health risks minimized if a park was developed on the property.

Public Involvement

Public engagement efforts included the following:
1. Forum meetings
2. Surveys for the Hood River Valley Parks and Recreation District
3. Surveys for the Hood River Valley Latino community
4. A focus group session with Hood River Valley high school students

Park features identified by the community included open play fields; trails around and throughout the property; play and exercise features for all age groups; community garden; and community gathering spaces.

Key Recommendations

1. Test soil to determine potential residues present. If contamination is found, work with DEQ to minimize potential human exposure.

2. Monitor the land’s development for unintended health consequences.

3. Develop the land into a park with a variety of features to promote life-long wellness among a range of age groups.

4. Consider the desired use of the land by the entire community, particularly vulnerable populations, when designing the park to develop a sense of ownership and increase potential use.

Outcomes

The HIA has allowed for the following outcomes:
- A more informed decision regarding the future development of the Barrett property. The decision regarding the development plans of the property is currently underway.
- The development of formal relationship between Hood River County Public Health Department and the planning department and the Parks & Recreation Department.
- Strengthened relationships with community stakeholders

To view the full document visit [http://healthoregon.org/hia](http://healthoregon.org/hia)
Accessory dwelling units (ADUs) are small, secondary housing units on a property with an existing single-family home. As of June 2010, Benton County did not allow for accessory dwelling units and did not have any set ADU standards. The absence of standards created a challenge for county officials to prohibit or limit the continued attempts of property owners to establish detached living quarters. As a response, the County comprehensive plan update encouraged the development of set ADU standards. Additionally, Planning Director Greg Verret stressed the need “to adopt an option for more flexible ‘family living arrangements,’ and provide greater clarity about what is allowed and what is not.”

The desire to develop these new policy standards has been met with concern regarding the multitude of positive and negative health impacts that could stem from the adopted set of regulations. As a result, an HIA was pursued in order to inform staff and decision makers on the potential positive and negative impacts and recommend policy options and mitigations that have the most benefit to health.

Scope and Methods

An advisory panel was formed to assist in determining the project’s focus and to provide technical assistance. Comprised of city and county staff members from a variety of backgrounds and professions, the panel members identified the following four topics as the focus areas for this ADU focused HIA:

1) Healthy housing    2) Access to goods and services    3) Social and family cohesion    4) Transportation and mobility

The HIA team partnered with a local nonprofit agency to organize two community meetings where impacts and concerns were collected. Impacts were also collected from advisory panel discussions. Lastly, a comprehensive search of peer reviewed literature on ADUs was conducted.
Key Findings

Policy impacts were assessed using indicators from the Healthy Development Measurement Tool and existing health conditions in Benton County. Five ADU policy options were created (Figure 1) by the advisory panel that represent a range of permitted uses from restricting current regulations to allowing a complete accessory dwelling unit.

**Additional Findings**
- If a policy allowing ADUs is adopted in Benton County, approximately EIGHT units will be created annually.
- If an ADU policy is adopted allowing units in UGB zones only, an estimated 3-4 units will be permitted and constructed annually.

**Public Involvement**

Two community meetings were held in Alsea and Monroe to discuss accessory dwelling units and housing issues in Benton County.

**Quotes from the Community meetings:**

“I want my disabled grandson to live with me, but I don’t want to live with his caregiver” - a community member expressed a need for a second unit because of a family member’s dependence on a live-in caregiver.

“There are very few starter homes out here, because you have to buy the acreage that comes with the house” - a response from a community member when asked about the potential benefits of accessory dwelling units as an alternative housing option.

“Manufactured homes work well with temporary medical needs. Once your done with them you pick them up and move them” - a response when asked about the current laws permitting temporary medical hardship trailers.

**Recommendations**

Recommended Policy Option to be Adopted: **Policy Option Three — Dependent Accessory Dwelling Units**

1. Include condition in the permit requiring ADU resident to be the homeowner, a relative, or a caretaker.
2. Include a condition in the permit requiring ADU to not be used as a rental unit.
3. Review the policy after 1, 5, or 10 years per the planning departments recommendation to review the number of units built, impacts on built environment and health, complaints from neighbors, etc.
4. Set an ADU “cap” at 8, 10, 12 permits annually per the planning departments recommendation. This cap may be increased, reduced or removed after the initial review of the policy is completed.

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**Figure 1 — Summary of Policy Impacts**

- Option 1 (No Policy Change): No additional effects on health.
- Option 2 (Restriction of Current Rules): Positive effect on health.
- Option 3 (Dependent ADUs): Positive effect on health.
- Option 4 (Independent ADUs): Negative impact on health.
- Option 5 (Independent ADUs in UGB Zones): Negative impact on health.

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Participants of the Community Listening Session
Crook is a rural county with a rough population of 19,000. Recent health data has found that 23.6% of Crook County adults reported being obese (2004-2007 BRFSS). A leading causes of adult death in Crook County is heart disease; a chronic condition resulting largely from individual behavior choices. Crook ranks 21st out of the 33 Oregon counties for health factors and health behaviors.

Community health is profoundly impacted by transportation policies. Crook County lacks infrastructure for bicycle safety and pedestrian safety. Of the 19,000 Crook County residents, more than half live in the city of Prineville. In Prineville, there are few bike lanes and a lack of sidewalk connectivity. Findings have indicated that local community members are more likely to drive to local events than to walk or bike. In an effort to create an Active Community and support the Prineville Planning Department in their effort to update their community plan, Crook County Public Health (CCPH) decided to conduct an HIA with the primary goal of evaluating the current pedestrian and bicycle situation in Prineville in the context of health impacts.

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- World Health Organization

Prineville Background

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Scope and Methods

The HIA Workgroup formed an advisory council of Prineville agencies, community advocates, and city planners to inform the scope, research and community engagement components of the project. The advisory council and community members identified three general policy areas to evaluate in the HIA:

1. Walkability in Prineville
2. Bicycle Safety in Prineville
3. Key areas for pedestrian safety

Existing conditions and background data were combined with public engagement efforts to assess the health consequences that may be influenced by the above policies.
Key Findings

The HIA found that HIA process and recommendations will have positive impacts on public health by increasing opportunities for physical activity, improving safety, and providing better access to health promoting goods and services.

Public Involvement

Undertaken public engagement efforts were the following:

1. Community Listening Sessions
2. Windshield Tours to examine existing conditions
3. Surveys for local community members
4. Photovoice Project

Quotes from the Community Listening Sessions:

“Sidewalks would encourage more children to walk to school.”

“This process is really exciting, to see how it can make a difference in our community.”

“Drivers do not stop and let pedestrians cross the street. They cut through the intersection.”

“We really need to pursue the “Rails to Trails Project.”

“There needs to more lighting by the high school, middle school, and downtown core area for pedestrian safety.”

Recommendations

The HIA produced 14 recommendations relative to the HIA focus areas. The following are 7 of those 14 recommendations:

- Increase current sidewalk connectivity (Harwood St., Elm St., Ochoco Creek Park, Lynn Blvd., Combs Flat Rd., etc.).
- Pursue “Rails to Trails” funding to increase number of pedestrian trails.
- Increase existence of bicycle lanes in Prineville / Crook County.
- Create connectivity of bicycle lanes.
- Reduce/eliminate parked cars in bicycle lanes.
- Implement traffic calming, such as clear identification of school zones.
- Create a safe crossing area for Highway 126.

Outcomes

As a result of the dissemination of this HIA, the city of Prineville was awarded $530,000 from ODOT and received a $60,000 local match for a total grant of $590,000 to tear out and rebuild the existing Ochoco Creek Trail (6400 feet). According to Senior Planner Scott Elderman, “This will be a greatly improved trail as it will be constructed with base (the current one doesn’t seem to have any), stormwater retention (to protect the creek) and will be 10 feet wide instead of the current 6 feet to better facilitate 2-way multi-use traffic”.

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Tumalo Background

Over the past decade, Deschutes County has experienced tremendous population growth. As major communities within the County (Bend, Redmond, Sisters, Tumalo, Terrebonne and LaPine) continue to grow, there has been an increased public resolve to maintain rural design characteristics in the face of urbanization. An inherent challenge in addressing growth is the need for County Planners to balance implementing land-use and transportation strategies with the public interest.

Deschutes County Health Services (DCHS) and a team of community partners chose to implement an HIA on the draft Tumalo Community Plan (TCP), a chapter of the 20-year County Comprehensive Plan Update, to examine how planning for rural communities can have either positive or negative consequences on public health. With its location between Central Oregon's largest and fastest growing cities, Bend and Redmond, this HIA also provided a chance to explore how growth in adjacent areas might impact the rural livability of Tumalo. The intent of this HIA was to impact policies within the plan, as well as share lessons learned with other rural communities and planners in Central Oregon.

Scope and Methods

The scoping involved the development of an advisory council, which included representatives from the public health, county planning, transportation and healthcare sectors as well as Tumalo area residents and community advocates. The Advisory Council identified the scope of the HIA around three policy focus areas: safety and accessibility of Highway 20, access to parks and recreational amenities, and the development of a multi-modal trail system.

In addition to researching background data and creating a community involved Advisory Committee, the HIA Workgroup held public engagement efforts and the Advisory Committee examined existing conditions as well as literature that may exist between proposed policies and positive or negative health outcomes.
Key Findings

In the long-term, taking an integrated approach to planning for transportation, land-use and other community policies will result in a more healthy and livable Tumalo. Linking amenities such as Tumalo State Park, new local parks, river access points, and the “downtown” core, will result in a greater number of people using active modes of transportation, as well as, those that are able to access amenities safely by car.

Public Involvement

Undertaken public engagement effort was the following:
1. Community Listening Session

Quotes from the Community Listening Session:
“I do not want to see a solid concrete divider that divides the town. There should be connectivity between both sides of Tumalo.”
“Additional access at least for bikes and peds at 5th and north end of Tumalo Junction to accommodate children and people seeking services in town.”

Recommendations

The HIA produced nine recommendations relative to the focus areas in the Tumalo Community Plan. The following are five of those nine recommendations:

- Support a ‘complete streets’ policy to enable safe access for all users.
- Support changes to promote traffic speed reduction.
- Improve crossing conditions across Hwy. 20
- Introduce a policy that supports the creation of a trails and recreation master plan.
- Introduce a policy that advocates for the expansion of the Bend Metro Park and Recreation District to include the Tumalo area.

Outcomes

The development of the Tumalo HIA has led to a variety of outcomes for the HIA team and the local community:

1. Many of the community needs and ideas that came up throughout the County Planning and HIA process have been incorporated into the Tumalo Community Plan language.
2. Local business associations now use the HIA as an advocacy tool when speaking with transit organizations.
3. Due to the HIA, ...
   a. Tumalo was awarded a Robert Wood Johnson grant to evaluate the long-term outcomes of the HIA
   b. Strong partnerships have been cultivated between the Planning Department and County Health Services
   c. The Central Oregon Intergovernmental Council worked with the Tumalo HIA team to establish a new HIA to analyze the health impacts that could stem from the regional transit plan that is under development.
   d. New partnerships with underserved communities (i.e. Warm Springs Reservation) have been developed.

To view the full document visit [http://healthoregon.org/hia](http://healthoregon.org/hia)
References


Glossary
These definitions are specific to HIA practice

Assessment: Assessment is a two-step process that first describes the baseline health status of the affected population and then assesses potential impacts of a proposed plan, policy or development. 1

Community: A group of people who live in the same geographical area, a shared history, culture, and/or language, and citizens for whom governments are responsible and to whom governments are accountable. 2

Comprehensive Plan: “A tool for planning the future growth or decline of a local community. Most importantly, a comprehensive plan can be used to address the constant change and evolution of a community. A plan is "coordinated" when the needs of all stakeholders have been considered and accommodated as much as possible.
- Comprehensive All-inclusive, both in terms of the geographic area covered as well as the functional and natural activities and systems occurring in the area covered by the plan.
- Land includes water, both surface and subsurface, and the air.” 3

Determinants of Health: Commonly considered factors that determine a person’s state of health. These factors can be biological, socioeconomic, psychosocial, behavioral or social in nature.

Environmental Assessment (EA): This is a concise public document that discusses a proposed action and the alternatives to the action. An EA may detail the direct, indirect, and cumulative impacts of the proposed action along with any alternatives. EAs can be the basis for determining whether a more comprehensive Environmental Impact Statement (EIA) is needed, or whether the proposed action will have no significant impact.

Environmental Impact Assessment (EIA): This is a process that helps identify, predict, and evaluate the effects on the environment of a proposed development or project. If the likely effects are unacceptable, mitigation measures can be taken to reduce or avoid those effects before major decisions or commitments are made.
Environmental Impact Statement (EIS): An EIS is a tool for decision making. It is used to describe the positive and negative environmental impacts of a proposed action. The EIS usually lists reasonable alternatives and mitigation measures that would avoid or minimize adverse impacts.

Environmental, Social, and Health Impact Assessment (ESHIA): “An integrated process by which the impacts of a project on the environmental, society, and the health of individuals and the surrounding community are assessed.”

Health Disparities: Health Disparities: Significant differences between one population and another. These are differences in the overall rate of disease incidence, prevalence, morbidity, mortality or survival rates. There are several factors that contribute to health disparities. Many different populations are affected by disparities including racial and ethnic minorities, residents of rural areas, women, children, the elderly, and persons with disabilities.

Health Effect, Health Impact: These two terms are used interchangeably and are defined as any change in the health of a population or subpopulation or any change in the physical, natural, or cultural environment that has a bearing on public health.

Health Impact Assessment (HIA): A combination of procedures, methods and tools that evaluates a policy, program or project’s potential effects on the health of a population - and the distribution of those effects within the population. HIA is a systematic process that uses an array of data sources and analytic methods, considering input from stakeholders. HIA provides recommendations on monitoring and managing the effects that are identified.

Health in all Policies: This is an approach that looks at all public- and private-sector policy-making through a health lens. The objective is to promote and protect the health of the population by ensuring the social and physical environmental influences on health are addressed.

Human Health Risk Assessment (HHRA): This is a process used by regulatory agencies to estimate the nature and probability of adverse health effects in humans who may be exposed to chemicals in contaminated environmental media (soil, sediment, air, water), now or in the future.
**Monitoring and Evaluation**: Monitoring and evaluation allow you to evaluate whether your HIA achieved its stated goals. Evaluation helps you and other stakeholders judge the success of an HIA, and answer questions that help shape future HIAs. Monitoring can include tracking whether your HIA recommendations have been adopted or implemented, or whether there have been changes in health status or health determinants in a community or population. Evaluation can address the process, impact, or outcomes of an HIA.\(^{16}\)

**National Environmental Policy Act (NEPA)**: NEPA was one of the first laws ever written (1969) that establishes a broad national framework for protecting our environment. NEPA's basic policy is to assure that all branches of government give proper consideration to the environment prior to undertaking any major federal action that could significantly affect the environment.

**Plan**: In the context of HIA, a plan is a future course of action for a community to achieve a desired vision or goal. A plan typically describes the vision and goals of a community or a problem that must be solved. It typically includes information that can be used to analyze the issue at hand, and identifies future actions and investments needed to address the issue and achieve the desired vision. Plans are prepared and implemented by all levels of government but are especially common at local government levels. There are many types of plans, including general or comprehensive plans, land-use plans, economic-development plans, and transportation plans. Plans that are commonly subjected to health impact assessment include plans for land use, infrastructure, and natural resource management.

**Policy**: A deliberate agreement or consensus used to guide decisions and achieve outcomes. Policies can guide and determine present and future decisions.

**Program**: A planned, coordinated group of activities or procedures undertaken for a specific purpose and implemented to achieve specific outcomes.

**Project**: A discrete effort undertaken to accomplish an objective. In HIA, this may be a proposal focused on a single population group or health determinant, with the objective of accomplishing a specific outcome.

**Recommendations**: These are suggestions or alternatives that could be implemented to improve public health, or actions that could be taken to manage the health effects, if any, that are identified.
**Reporting:** The stage where the HIA team documents and presents the findings and recommendations to stakeholders and decisions-makers.

**Risk Assessment:** Traditionally, risk assessment is defined as ‘the characterization of the potential adverse health effects of human exposures to environmental hazards’. Risk assessment can be divided into four major steps:
- Hazard identification (identifying the types of health effects that could be caused by exposure to the contaminant in question),
- Dose-response assessment (characterizing the relationship between dose and toxic effects),
- Exposure assessment (calculating a numerical estimate of the intensity, frequency, and duration of exposure to the contaminant), and
- Risk characterization (estimating the extra risk to the population exposed to the contaminant).

**Screening:** This is the step in HIA that determines whether there is a need for the HIA, or whether the HIA can add value to the proposed issue. The screening step will help determine whether a proposal is likely to have (positive or negative) health effects and whether the HIA will provide information useful to the stakeholders and decision-makers.

**Scoping:** The scoping step in HIA establishes the extent of the assessment that will be conducted as well as the goals, research questions to be answered, potential approaches (data collection, community engagement, etc.), stakeholder responsibilities, and definitions of vague terms. The main purpose of the scoping process is to create a workplan for the HIA that is feasible, inclusive, and well-defined.

**Stakeholder:** Any individual or group that will be affected by the outcome of a decision or that has an economic stake in the outcome and the proponents of a project. Stakeholders include the affected community, specific interest groups, individuals, organizations, agencies and more.

**State Environmental Policy Act (SEPA):** SEPA is a state-level plan that requires an environmental review for any projects that involve a state agency decision that is not specifically exempted by the law. They are designed to ensure that state and local agencies consider the effects on the environment during their decision-making processes. Oregon does not have a SEPA.
**Strategic Environmental Assessment (SEA):** A SEA is a process to ensure that significant environmental effects resulting from policies, plans and programs are identified, assessed, mitigated, communicated to decision-makers, and monitored and that opportunities for public involvement are provided.
Citations


