HAPI

Health
And
Places
Initiative

HOW TO GUIDE

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HOW TO GUIDE: HEALTH ASSESSMENT TOOL 3
HAPI HEALTH ASSESSMENT WORKSHOP

Photo by Ann Forsyth

Version 1.2

The HEALTH AND PLACES INITIATIVE (HAPI) investigates how to create healthier cities in the future, with a specific emphasis on China. Bringing together experts from the Harvard Graduate School of Design (HGSD) and the Harvard School of Public Health (HSPH), it creates a forum for understanding the multiple issues that face cities in light of rapid urbanization and an aging population worldwide.

Health and Places Initiative
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Process Checklist

The HAPI Health Assessment Workshop can be done as a simple series of steps.

Starting the Process

- ☐ Step 1: Identify the plan, program, process, or place to be assessed
- ☐ Step 2: Screening and scoping
  - Complete Screening Survey of Health in Place (SSHIP) checklist to determine if further assessment is needed
- ☐ Step 3: Getting people in place for a health assessment workshop (some of the following can overlap)
  - An organizer or project manager to coordinate the work
  - A technical staff member or members to do the background reports etc.
  - A steering committee to make sure the right people are at the table and the process makes sense
  - Informants to provide local and expert tips
  - Workshop participants
- ☐ Step 4: Planning the overall tasks and timeline of the health assessment workshop

Getting Information Together for a Health Assessment Workshop

- ☐ Step 5: Doing an inventory of existing plans and policies
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- ☐ Step 7: Talking with people who are affected, interested or have expertise
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- ☐ Step 12: Developing the agenda
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Writing the Results and Moving Forward

- ☐ Step 15: Writing the results
- ☐ Step 16: Implementing the results
- ☐ Step 17: Evaluating the process (realistically few people do this, though it is considered a best practice)

Source: Adapted from Ison 2002, Design for Health 2008. Used with permission.

How to Guide Organization

The How to Guide is organized into three parts, corresponding to different steps:

- **Part 1: Outline of Background Report for HAPI Health Assessment Workshop**: Describes how to create a background report for the HAPI Health Assessment workshop. Focuses on steps 5–11 of the process checklist.

- **Part 2: Workshop Logistics**: Describes the event planning process of hosting a workshop, as well as developing the agenda and activities. Focuses on steps 12–14 of the process checklist.

- **Part 3: Outline of Final Report for HAPI Workshop**: Describes content and ordering of writing the final health assessment report. Focuses on step 15 in the process checklist below.

PART 1: BACKGROUND REPORT FOR HAPI HEALTH ASSESSMENT WORKSHOP

This half-day workshop can be used to look at a variety of different kinds of places, programs, plans, projects, and programs. For simplicity we frequently shorten this list, often just mentioning a project or place.

The background report lays the foundation for all participants attending the HAPI Health Assessment Workshop to get up-to-speed on the entity under review: how the health assessment is being conducted, the workshop format, and preliminary findings of concern. It should be written clearly in lay language. Typically they are around 40-50 pages including illustrations, though it may be longer for complex projects or if it contains many charts and maps.

The background report typically includes:

A. Project or place key features
B. Introduction to and reasons for a health assessment
C. Steering committee members
D. Workshop format
E. Existing plans and area profile
F. Input from stakeholders and experts
G. Preliminary health impact evaluation
H. Summary of relevant evidence

A. Project or place key features

Why this section?

In order to provide workshop participants with a basic understanding of the scope of the project or place of interest, it is important to describe the key features such as geographic area and relevant history.

Key components to include in the background report:

Maps

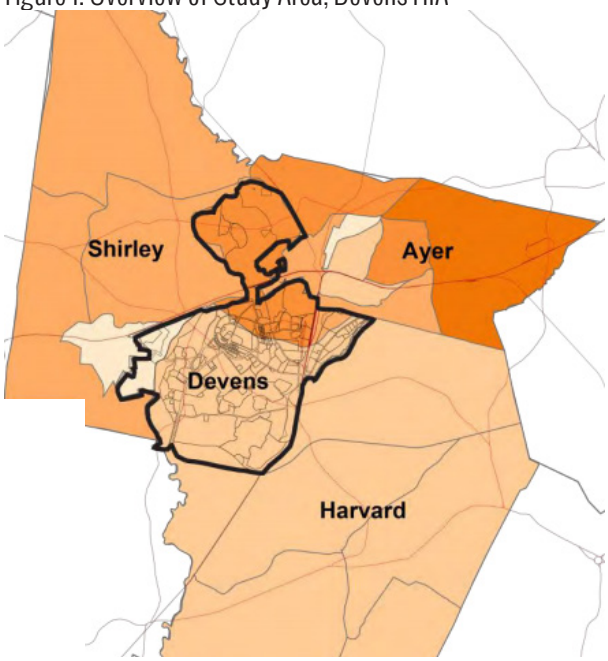
- Project or place boundaries (municipality, site, or natural boundaries).
- Geography of the project or place as it is relevant to health.

Narrative and tables

- An overview, history, and goals of the project or place
- The surrounding area to consider (region, adjoining municipalities, or natural boundaries). This area will be used for both context and comparison (e.g. tables can present information for the focus area and for the surrounding area). Such comparisons are extremely important.
- Affected populations (population within the area of interest and larger area[s], groups especially vulnerable to environmental health impacts, resident demographics, housing stock characteristics, employment data, etc.).
- Concurrent, related, or complimentary initiatives associated with the focus area important to consider (e.g. comprehensive plan, food systems plan, regional HIAs), if available.

Figure 1 illustrates that the scope of the Devens health impact assessment extends beyond the immediate boundaries of the redevelopment project and into surrounding jurisdictions.

Figure 1. Overview of Study Area, Devens HIA



Source: Lowitt et al. 2014, 21. Used with permission.

PART 1: BACKGROUND REPORT FOR HAPI HEALTH ASSESSMENT WORKSHOP

This section of the background report should also present real or hypothetical alternative scenarios to the project or plan being assessed. **This is can be omitted for an existing place, although it may be possible to examine a do-nothing alternative vs. the existing plan.**

Questions about alternative scenarios may include:

- What are the potential impacts on health if a different project or proposal is adopted? This might be the existing plan or proposal for the area which the one being examined is replacing.
- What if no change is made (a "do-nothing" option)?
- What might the alternative (either alternative proposals or comparison places) look like?

Figure 2, included in the Devens HIA background report, displays two development scenarios side-side for easy comparison.

Figure 2. Mock Development Scenario Key Features: Devens, MA Health Impact Assessment

Development Scenario #1	Development Scenario #2
Total Development Area: 30 acres	**Total Development Area:** 60 acres
Total number of housing units: 120	**Total number of housing units:** 120
Lot Sizes: • Single family (large) – 9,000sf • Single family (small) – 5,000sf • Two-family – 9,000sf • Three-four family – 13,000sf • 20-unit multi-family – 30,000sf	**Lot Sizes:** • Single and two-family units – 15,000 sf • Three-four family units – 17,500-20,000sf • Multi-family (max 8 units/structure) – 22,500-30,000sf
Housing Mix (# of units & type): • 30 single family • 16 single family cottage • 16 two-family • 28 three-four family • 30 six-twelve unit multi-family • Mix of rental and for sale units	**Housing Mix (# of units & type):** • 80 single family • 22 two-family • 12 three-four family • 1x6-unit multi-family • Mix of rental and for sale units
Overall density: 7.0 units per acre	**Overall density:** 2.7 units per acre
Affordability Requirements: • 10 low income units (multi-family) • 30 moderate income units (mix of single and multi)	**Affordability Requirements:** • 12 low income units (multi-family) • 18 moderate income units
Frontage: 50 feet/lot	**Frontage:** 100 feet/lot
Street Right of Way Widths: • Grant Road – 55' • Local Streets – 40' • Neighborhood Road – 20'	**Street Right of Way Widths:** • Grant Road – 66' • Local Streets – 50'
Amount of Impervious: 10 acres	**Amount of Impervious:** 20 acres
Amount of Open Space: 10 acres	**Amount of Open Space:** 15 acres

Source: Adapted from Lowitt et al. 2014, 15. Used wiith permission.

PART 1: BACKGROUND REPORT FOR HAPI HEALTH ASSESSMENT WORKSHOP

B. Introduction to and reasons for a health assessment

Why this section?

Participants attending the half-day HAPI Workshop may be unfamiliar with health assessments. An introduction in the background document—what is a health assessment, why it is being done, and how it will be used—can set the context for participants to better understand the purpose of the workshop. Depending on the length of the background document, this could be included in the body of the background report or as an appendix.

An introduction to a health assessment may include:

- A summary of why health and place matter
- A definition and history of health impact assessments
- Steps involved in a health assessment (see Figure 4)
- Rationale for and/or benefits to conducting a health assessment (see Figure 5)
- Justification for doing a health assessment of your specific place or project by identifying health or environmental issues according to the screening and scoping surveys
- The methods and timeline of the health assessment (see Part 2: Workshop Logistics)
- The health assessment's objectives, limitations, and intended audience

Why health and place matter

- Define key terms: health, environmental health, healthy community, social determinants of health, impacts/effects, human environments, affected environment, significance, etc.
- Define and describe key topics: for example, accessibility, air quality, climate change, environment and housing, food environment, mental health, noise, physical activity, social capital, water quality, etc. (see Figure 3). This is more of a listing, and less comprehensive than the section of relevant evidence on health and place (see step G).
- Describe the connections between health assessments, equity or environmental justice for vulnerable populations (Rhodus et al. 2013, 85)

Figure 3. The SR 520 Health Impact Assessment Connections Between Health and Place

Source: Adapted from Fleming and McLerran. 2010, 13. Graphic jointly developed by the Public Health – Seattle & King County and Puget Sound Clean Air Agency. Used with permission.

PART 1: BACKGROUND REPORT FOR HAPI HEALTH ASSESSMENT WORKSHOP

A definition and history of health impact assessments

A very brief description of the different types of assessments—rapid, desktop, and comprehensive—to place this one in context.

- Describe the health assessment steps of screening, scoping, assessment, recommendations, reporting, and evaluation (a diagram like the one below is helpful here).

Figure 4. Health Impact Assessment Steps

Step	Purpose	Task
SCREENING	Determine whether HIA is appropriate and required	• Pre-screening tasks • Conduct a screening meeting • Make screening recommendations
SCOPING	Set out the parameters of the HIA	• Set up a steering committee • Choose the appropriate level of depth of HIA that needs to be undertaken • Set the scope of gathering the evidence • Design a project plan
IDENTIFICATION	Develop a community / population profile and collect information to identify potential health impacts	• Develop a community/population profile • Collect primary and secondary, qualitative and quantitative information
ASSESSMENT	Synthesise and critically assess the information in order to prioritise health impacts	• Assess the information on the impacts collected from the different sources. • Deliberate on the impacts to assess their significance and prioritise them
DECISION MAKING & RECOMMENDATIONS	Make decisions to reach a set of final recommendations for acting on he HIA's findings	• Develop a draft set of concise and action-oriented recommendations • Write a final recommendations report for implementation and action
EVALUATION & FOLLOW-UP	Evaluate the processes involved in the HIA and its impact, and follow up the HIA through monitoring and a health impact management plan	• Conduct process and impact evaluation • Set up monitoring the impacts • Develop a health impact management plan

Source: Adapted from Harris et al. 2007, 4

PART 1: BACKGROUND REPORT FOR HAPI HEALTH ASSESSMENT WORKSHOP

Why Conduct a Health Assessment?

- To identify plans, projects, or areas with significant health impacts or those that need further analysis (see Tool 1: Screening Survey of Health in Place [SSHIP]).
- To influence policies or plans to mitigate negative health effects, and promote positive health effects, through providing decision makers with evidence based findings and recommendations.
- To increase awareness of how decisions affect health.
- To build awareness of the connections between health and other sectors (e.g. built environment, policy).
- To build consensus around potential health impacts and recommendations that would improve health, identify alternatives and trade-offs.
- To encourage a participatory approach to planning and decision-making, especially around controversial issues and projects, and engage and empower residents and the community.

Figure 5. Benefits of Health Impact Assessments

Benefits of HIA

Health Knowledge and Action

- Increases awareness across sectors of how decisions may affect health
- Identifies the connections between health and other policy areas
- Co-ordinates action between sectors to improve and protect health

Organisational Development

- Potentially reduces demand on NHS and social care services by investing in healthy policies,

programmes and projects that prevent ill-health

- Makes the decision making processes more transparent
- Promotes evidence-based planning and decision-making

Communities

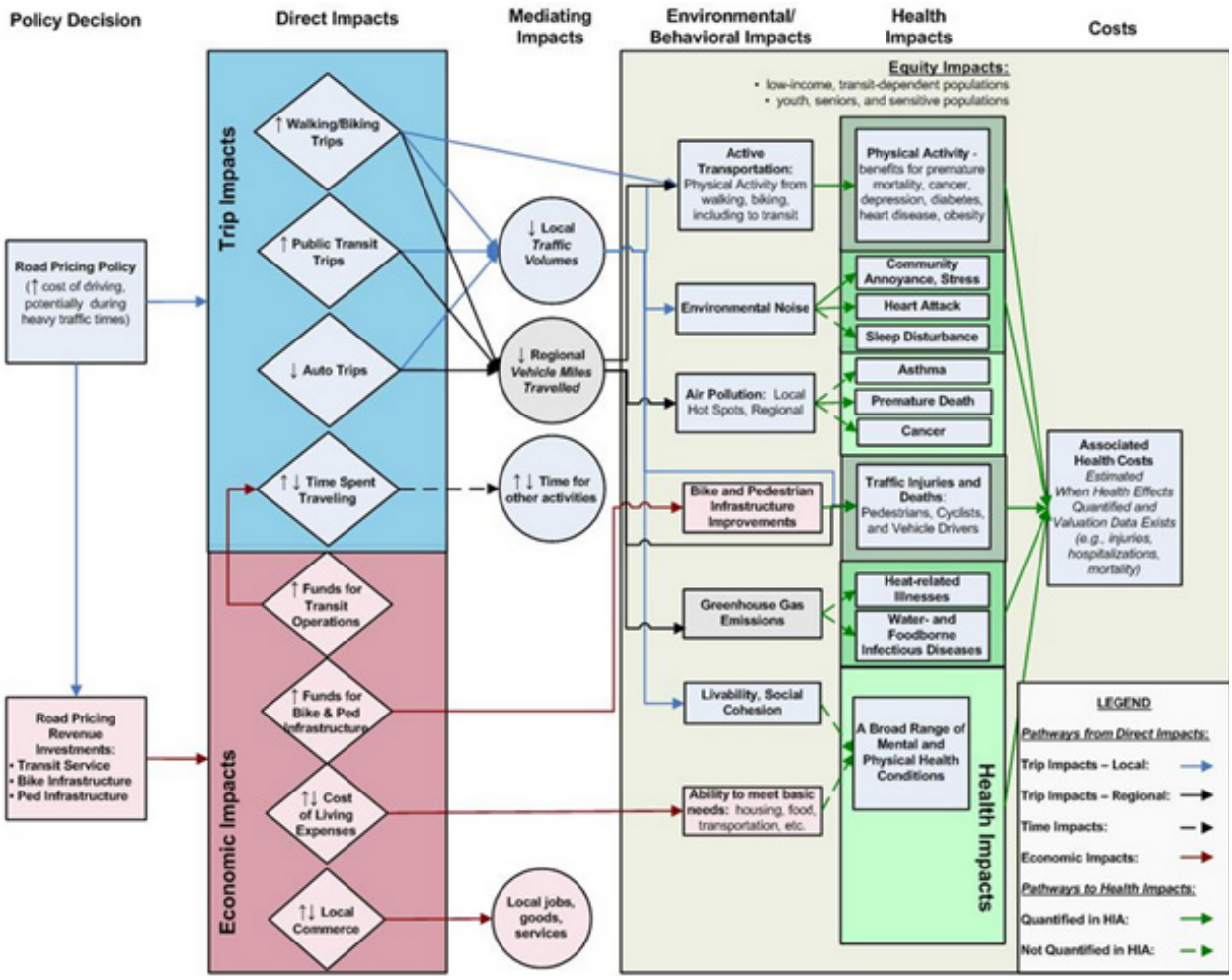
- Promotes greater equity in health
- Proposes actions to maximise health benefits and minimise the health risks
- Involves the communities who will be affected by a proposal
- Supports the development of environments and services that meet local needs
- Enhances public/citizen engagement

Source: WHIASU 2010, 5. Used with permission.

PART 1: BACKGROUND REPORT FOR HAPI HEALTH ASSESSMENT WORKSHOP

A diagram in the background report introduction can help illustrate identified issues, impacts, and specific points of intervention (see Figure 6).

Figure 6. Potential Health Effects of Road Pricing Policy



Source: Wier et al. 2011, 15. Used with permission.

PART 1: BACKGROUND REPORT FOR HAPI HEALTH ASSESSMENT WORKSHOP

C. Steering committee

Why this section?

Information about the steering committee—how it was formed, who sits on it, and the committee roles and responsibilities—provides transparency by informing those not involved in organizing the health assessment about the process.

Who is involved?

Effective engagement of a broad range of stakeholders is critical to a successful health assessment. The steering committee should be a well-balanced representation of the community, and include decision-makers with the ability to change the proposal, proposal proponents, community representatives most likely to be affected by the proposal, and key informants with the knowledge of the potential health impacts and/or the population. When developing a steering committee, it is useful to document the roles and responsibilities of membership in a memorandum of understanding (Rhodus et al. 2013, 85).

These members could be representatives of:

- Business groups
- Community associations
- Government departments:
  - Economic development
  - Parks and recreation
  - Planning
  - Public works
  - Public health
  - Schools
- Nonprofit groups
- Religious groups
- Residents

Roles for steering committee members may include:

- Project manager (usually in the agency or group sponsoring the health assessment)
- Technical staff members (usually in the sponsoring group, compiling information and writing the report, although a consultant is often used)
- Workshop facilitator (may be the project manager, consultant, or someone else)
- Topical experts, could be responsible for providing information (university, public health, planning experts)
- Community representatives may be responsible for getting input from various groups or residents, and inviting them to the rapid HIA workshop
- All members would vote or consult on the scoping exercises, make decisions about workshop organization and format, and make comments on the report or recommendations

D. Workshop format

Why this section?

The format of the half-day health assessment workshop can be shaped depending on a variety of factors: the meeting objectives, the questions to be addressed by attendees, and the level of engagement organizers want to foster throughout the event. The background report should include a description of the workshop agenda and activities for participants. See Part 2: Workshop Logistics (page 23) for more information on developing the agenda and workshop activities.

PART 1: BACKGROUND REPORT FOR HAPI HEALTH ASSESSMENT WORKSHOP

E. Area profile and existing plans

Why this section?

The bulk of the background report will include the area profile and a summary of existing plans and policies. An area profile captures the social, health and environmental characteristics of the local community, and the population that may be affected by the project or proposal's implementation (Ison, 2002, 3-5). The area profile may also help to identify potentially vulnerable groups, establishing a baseline against which possible future health impacts can be assessed (Harris 2007, 15).

Information for the area profile may be gathered from plans reviewed as part of the inventory mentioned below, from census data, health and environmental agencies, and even previous health assessments. A review of existing plans, programs and policies that relate to the project or proposal being assessed provides additional context for conducting a health assessment by providing a reference point or source of comparison to other activities that have taken place nearby. Examining each of these documents through a health lens is an important component to identify the potential impacts, both positive and negative, of the project/proposal implementation.

Social, health and environmental characteristics may include:

- Demographics (size, density, age, gender, income and employment, socio-economic status, vulnerable groups)
- Health status (vulnerable groups especially populations with chronic diseases, obesity)
- Quality of life indicators (perceived health or wellbeing, crime rates, accident rates, quality of education, unemployment rates)
- Environmental information (housing, transport, air and water quality, soil conditions)
- Physical characteristics (weather, geography)
- Existing land uses (zoning, development, agriculture)
- Access to community resources (food, water, medical, jobs, schools)
- Local people's views of the area and of the services provided (walkability assessments, fear of crime surveys, etc.)

Note: Social statistics should be mapped in a logically defensible way. That is, using theoretically defensible categories like poverty lines or quartiles (groups of 25%) and not 'natural breaks'. It is also important to include comparisons of the area of interest with wider geographical areas of the region and/or country.

Existing plans and programs to review in the inventory may include:

- Comprehensive plans
- Zoning policies
- Transportation plans and policies
- Park and open space plans
- Clean water plans
- Physical activity and walking programs
- Senior support activities
- Healthy food procurement policies
- Existing Health Impact Assessments

Additional data sources (see step G)

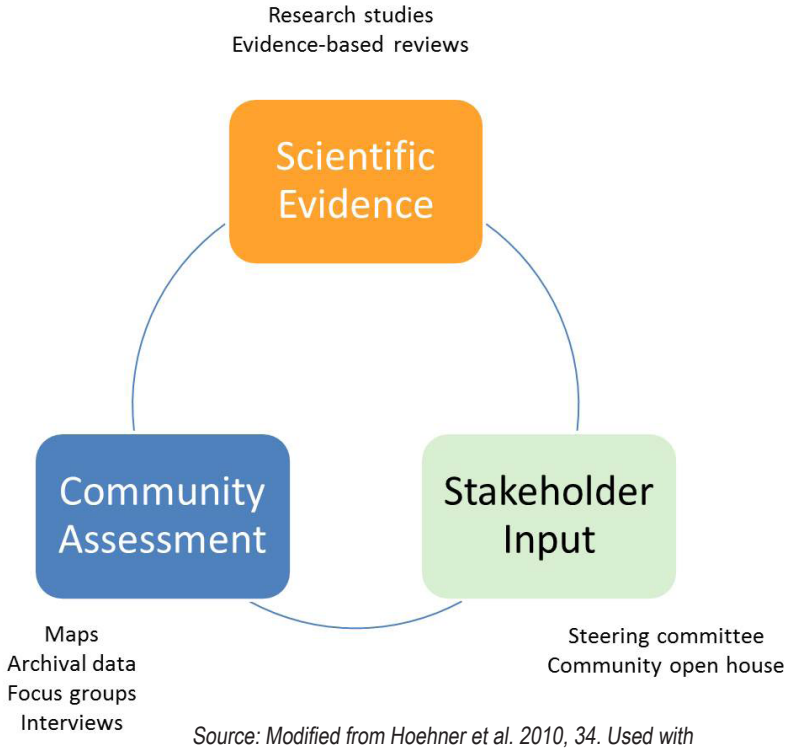
- In addition to the local data gathered specifically for the health assessment (see topics above) it is useful to gather data from additional sources on health or environmental topics.
- Best available evidence should be used, including:
  - Existing systematic literature reviews, considered the "gold standard" of the health impact literature
  - Other high-quality and comprehensive literature reviews
  - Health assessment-specific literature reviews, or "grey" literature, such as professional reports.
- It is best if evidence comes from multiple sources (see Figure 7).
- Whatever data sources are used, they should be described and documented for transparency.
- Additionally, any data gaps should be identified, as well as some assessment of the quality of the evidence.

PART 1: BACKGROUND REPORT FOR HAPI HEALTH ASSESSMENT WORKSHOP

Examples from real HIAs

Figure 7 shows how scientific evidence, stakeholder input, and community assessments were used for the Page Avenue Health Impact Assessment. All three provide valuable information. Scientific evidence can tell us what built environmental or social determinants relate to health, and how strongly. Community assessment and stakeholder input can tell us what challenges and/or assets a particular community has, and what residents consider the important environmental, social, or health factors.

Figure 7. Page Avenue HIA's Methods to Gather Information



Source: Modified from Hoehner et al. 2010, 34. Used with permission.

Figure 8. Scope of Mac Arthur BART Transit Villiage HIA

Social and Environmental Health Determinants	Relationships between Health determinants and health outcomes	Facts About the Decision at Hand	Candidate Questions for Health Impact Assessment	Candidate Mitigations and Design Strategies	HIA Research Methods and Tasks
Housing Housing size Housing affordability Housing quality Location quality Stable Housing tenure	Crowded conditions increase risks for infections, respiratory disease, mental health, and fire risk. Unaffordable rents or mortgages result in trade-offs between housing, food, and medical care.	518 – 625 Units located on existing parking lot east of BART station. Twenty percent of units will be affordable. Affordable housing will be architecturally homogenous, but spatially segregated from market rate housing Subsidy from the City drives quantity of affordable housing All BMR housing will be rental, while market rate will be for sale Most units will be less than 900 sq ft	*Does the design of the MBTV housing promote and protect health by via materials choices, ventilation systems, and site location and orientation?* *Does the project anticipate the needs of long term maintenance and upkeep of the housing?* *Is the location of the housing accessible to resident needs, such as retail, parks, and schools?* *Is the location of the housing safe for residents, neighbors and visitors, including seniors, children, and health sensitive populations?* *Will the transit village help to meet the housing needs of area residents with regards to size, quality, and affordability? Will it meet these needs for Oakland residents? Regional area residents?*	*Unbundling parking from housing ownership* *Reducing housing production costs to increase BMR proportion or affordability* *Integrating BMR and market rate housing within buildings* *Have options for renting and owning both BMR and market rate housing*	*Assess of demographic makeup of neighborhood and demographic trends (income, education, ethnicity, household size, etc) using Census of Geolytics software* *Obtain market research on demographics of home purchasers to assess the expected demand for family units at the project site* *Evaluate the housing produced by the project relative to needs based on area and city demographics* *Identify housing developments, particularly near transit villages that have integrated BMR and market rate housing and assess how they were made feasible* *Assess best practices in reducing housing production costs.*

Source: UCBHIG 2007, IS-7.

PART 1: BACKGROUND REPORT FOR HAPI HEALTH ASSESSMENT WORKSHOP

F. Input from stakeholders and experts

Why this section?

Before conducting the half-day HAPI Workshop, it is likely that technical staff or members of the steering committee have connected with field experts, elected officials, community leaders, residents, and other stakeholders through interviews or meetings to better understand the personal and political dimensions of the project or proposal under review (RWJF/PEW 2013).

Since not all stakeholders that provided input will be in attendance at the HAPI Workshop, the background report should summarize the key viewpoints and convey the range of perceptions about the project or proposal. Input can be obtained in multiple ways—interviews, surveys, meetings, etc. If stakeholders were analyzed for characteristics, such as interests and influence, that data can be included in this section of the background report. Table 1 provides an example of how the information can be conveyed.

Table 1. Analysis of Stakeholder Characteristics (power and influence)

Stakeholder	National Institute of Alchohol	National Public Health Institutue	Association of Spirit Producers
Involvment in Issue	Coordinates national activities in alcohpl research, prevention & treatment	National center of public health, alcohol has been a neglected issue but is now included in strategic plan	Has market interest in maximizing alcolhol sales; is worried about decreased market share
Interest in Issue	High	Low-medium	Low
Influence/ Power	Low	Medium	High
Position	Supportive	Non-mobilized	Opposed
Impact of Issue on Actor	High	Low-medium	High

Adapted from Varvasovszky and Brugha 2000, 342

Who is typically involved?

In the context of health assessments, stakeholders are commonly defined as those concerned with or likely to be affected by the proposal. Examples of stakeholders and experts include:

- Government representatives (public health, planning, transportation environmental protection departments)
- Public safety officials (police, fire agency)
- Advocates of the affected community or population
- Business leaders
- Researchers and technical experts
- Decision makers involved in planning and implementing the project or proposal
- Local elected officials
- Residents

Adapted from Ison 2002, 1-9.

Page Avenue Revitalization HIA

Washington University in St. Louis, Missouri (USA) conducted an HIA on a revitalization project of a main street in the City of Pagedale. Key decision-makers and stakeholders involved in the HIA included:

- **Developer**, including Beyond Housing Executive Director and Board of Directors
- **City of Pagedale**, including the Mayor, Board of Aldermen, Residents, and Police Department
- **St. Louis County,** including TIF Commission, Economic Council (and subunit Economic Development Collaborative), and County Government (Planning, Health, and Transportation)
- **East-West Gateway Council of Governments**
- **Missouri Department of Transportation**
- **Community stakeholders include** residents, business owners, civic and religious leaders, school officials

Source: Hoehner 2010, 3

PART 1: BACKGROUND REPORT FOR HAPI HEALTH ASSESSMENT WORKSHOP

G. Summary of relevant evidence

Why this section?

Summarizing the evidence relevant to the project or proposal being assessed is important for several reasons. First, presenting scientific or academic evidence related to health and place encourages a balanced perspective in the background report, especially if many of the health concerns being raised come from key stakeholders whose health concerns are based on perception or personal (qualitative) experiences. Second, including the evidence base can help inform participants' understanding about a plan or proposal's impacts on health, and their recommendations to address those impacts (Ison 2008, 2-11).

How to cull the evidence

With all the resources available on the Internet, it may be difficult to determine the types of research and literature to summarize in the background report. Table 1 provides a nine-step framework for practitioners to follow when developing a literature review for a health assessment. **This is likely to be quite difficult for practitioners so we strongly suggest looking for practitioner-oriented summaries**.

Examples of existing reviews aimed at practitioners include:

- Health and Places Initiative (Research Briefs are listed on page 18, and can be accessed here http://research.gsd.harvard.edu/hapi/research/research-briefs/).
- UCLA Health Impact Assessment Clearinghouse Learning and Information Center (http://www.hiaguide.org/methods-resources/links)

Table 2. Steps to Review Evidence for a Health Assessment

1. Frame the question(s)	The literature review should seek to answer questions related to the health issues raised by project or plan, the local context, and population groups likely affected.
2. Determine whether a literature review is required, and its scope	Determine if existing, relevant literature reviews already exist by searching in key databases, websites, and/or ask colleagues and topical experts.
3. Purpose, organization and structure	Clarify the organization and/or individual conducting the literature review and its purpose. Structure the review to include the following details: The review question(s) The process of searching for existing research and literature reviews Research findings, references, and citations Conclusions
4. Set inclusion and exclusion criteria	Determine the types of evidence, research and studies to review and not reviewed
5. Literature search	Describe the search parameters: Date range of published articles, reports, studies, books, etc. Databases used Keyword searches Topical experts or researcher contacted Number or articles or reports used in review/summary
6. Critical appraisal	Explain any weaknesses in a study that may affect confidence in its findings/conclusion
7. Interpretation	Describe the process of summarizing the study findings Mention gaps in the literature or other factors affecting the quality of the research review
8. Conclusion	Review should provide clear conclusions from evidence, and be relevant to the topic, and population groups likely affected by the proposal or plan.
9. Reporting	Review should contain information from steps 1–8, and be written for a broad audience (i.e. easy to read)

Source: Modified from Mindell et al. 2006, 3-11

PART 1: BACKGROUND REPORT FOR HAPI HEALTH ASSESSMENT WORKSHOP

Health and Place Initiative Research Briefs

The HAPI project has developed a series of research syntheses that summarize the links between human health and places at the neighborhood or district scale. Go here (http://research.gsd.harvard.edu/hapi/research/research-briefs/0) to download briefs on the following topics:

Built environment qualities

- Disasters
- Noise
- Toxics
- Water quality
- Climate change
- Housing

Connectedness

- Geographic Accessibility
- Access to health care
- Social Capital
- Mobility and Universal Design

Health-related behaviors and outcomes

- Physical activity options
- Mental Health Effects
- Healthy Eating Options
- Safety (accidents, crime)

General

- Physiology and psychology of aging

H. Preliminary health impact evaluation

Why this section?

Results of the health assessment screening and scoping tools that preceded the workshop planning efforts, the inventory of existing plans and policies (step E), and the feedback gathered from stakeholders (step F) can be analyzed to make preliminary predictions of the health impacts that would result from the project, proposal, or alternative approach being adopted. A written evaluation of the predicted outcomes in the background report gives workshop participants something to react to rather than start from scratch at the workshop.

Sources for predicting health impacts

- The organizer, technical team, and/or steering committee can start predicting likely health impacts for the proposal or place and alternatives using the following information:
  - Steps A, B, E, F, and G of the background report materials (see pages 7-17)
  - The screening and scoping activities
- The screening and scoping activities might employ tools (such as the Health and Places Initiative Health Assessment Tools 1 and 2), but it is helpful to go beyond that by including information about direction, magnitude, certainty, likelihood, and evidence base for health effects.

Screening evaluation

Screening is the first step of a health assessment, and evaluates whether completing a health assessment is worthwhile. If moving forward with a health assessment workshop, the results from the screening process suggests that the scale and influence of the proposal or project are significant enough to examine whether there will be health impacts on the surrounding area and/or vulnerable populations. The screening process should be clearly documented.

Figure 9 provides an example of a screening checklist completed in Arden Hills, Minnesota (USA) to determine whether an HIA of redevelopment proposal for a former munitions manufacturing and testing site would be needed.

PART 1: BACKGROUND REPORT FOR HAPI HEALTH ASSESSMENT WORKSHOP

Figure 9. Sample Preliminary Screening Checklist

Key Questions	No	Uncertain	Yes	
Geographical extent: Does it apply to a geographic area of a full city block or larger?	0	1	2	
Reversibility: Will the changes be difficult or expensive to reverse once put in to place?	0	1	2	
Population size: Does it substantially increase the residential population or workforce of any area 100 acres or more (e.g. an increase greater than 33%)	0	1	2	
Cumulative impacts: Is it occurring in a place where special local health problems have been identified (e.g. traffic safety, air quality, lack of healthy foods, contaminated brownfields)?	0	1	2	
People affected: Does the project or plan affect vulnerable groups (e.g. children, older people, and people with low incomes)?	0	1	2	
Land use: Does it substantially change the predominant land (e.g. from residential to commercial)?	0	1	2	
Institutional capacity: Is the capacity of local government, nonprofit, and private organizations to address any potential problems adequate?	0	1	2	
Total	0	+ 2	+ 10	= 12
If total score is 11 or greater, HIA may be needed, move to Part 2. If total score is 7-10, a HIA is potentially needed, moving to Part 2 is recommended. If total score is 6 or less, no HIA is required. You may wish to do a HIA on a targeted area or problem.				

Source: Arden Hills, MN City Planning HIA Workshop (2010, 57). Used with permission.

Scoping evaluation

Scoping is the second step in the health assessment process, and identifies health issues that may emerge as a result of the project or proposal.

Evaluation using a checklist or worksheet

Many of the screening and scoping tools available are formatted in the form of a checklist, as Table 2 shows, with questions organized in a way to help users evaluate the likely health impacts of a project or proposal. Worksheet tools enable users to think through the direction, magnitude, certainty, likelihood, and evidence base for health effects.

During a health assessment workshop, a checklist can be put into a worksheet (or other) format for workshop participants to evaluate (see Table 2). Paticipants can initially prioritize or rank the main health effects based on the scoping evaluation, combined with stakeholder input. The assessment process should go beyond just direction of impact (positive or negative), it should also include degree of impact, likelihood, distribution, and permanence as factors as well. Whatever process is decided, it should be clearly documented, and ideally include some likely estimates of projected impacts.

HAPI has developed a checklist tool that combines the screening and scoping process together, called Screening Survey of Health in Place (SSHIP). The tool aims to help determine whether the costs of doing a more resource-intensive assessment are outweighed by its benefits, and identify, in a preliminary way, which health issues are likely to be of concern. Go to (http://research.gsd.harvard.edu/hapi/research/tools/health-impact-assessment-tools/) to view the SSHIP.

PART 1: BACKGROUND REPORT FOR HAPI HEALTH ASSESSMENT WORKSHOP

Table 3. Sample Worksheet to Evaluate Health Impacts

Health impact (issue)	Positive or negative?	Likelihood of impact?	Differential impacts on groups	Distribution of impact?	Measurable indicator?	Evidence base for knowing about the issue
Geographic access to Resources	+ for most resources; -- for grocery stores	P	Children, elderly, disabilities	N	Residences and GIS identified resources	GIS, site visits
Air Quality	+++, outdoor air quality, ++ indoor air quality	P	Children	N	Distance to pollutant, air toxin measurements, % of households with indoor biomass fuel burning (unimproved technologies)	GIS, household surveys
Mental Health	++	P	Uncertain	N	% of households with access (<500m) to public greenspaces	GIS

Source: Ann Forsyth

Key:
+++ strongly positive
++ moderately positive
+ mildly positive
- mildly negative
-- moderately negative
--- strongly negative
U uncertain
S=speculative
P=probable
B= building or block scale
N= Neighborhood
M=Metro
N=National

PART 1: BACKGROUND REPORT FOR HAPI HEALTH ASSESSMENT WORKSHOP

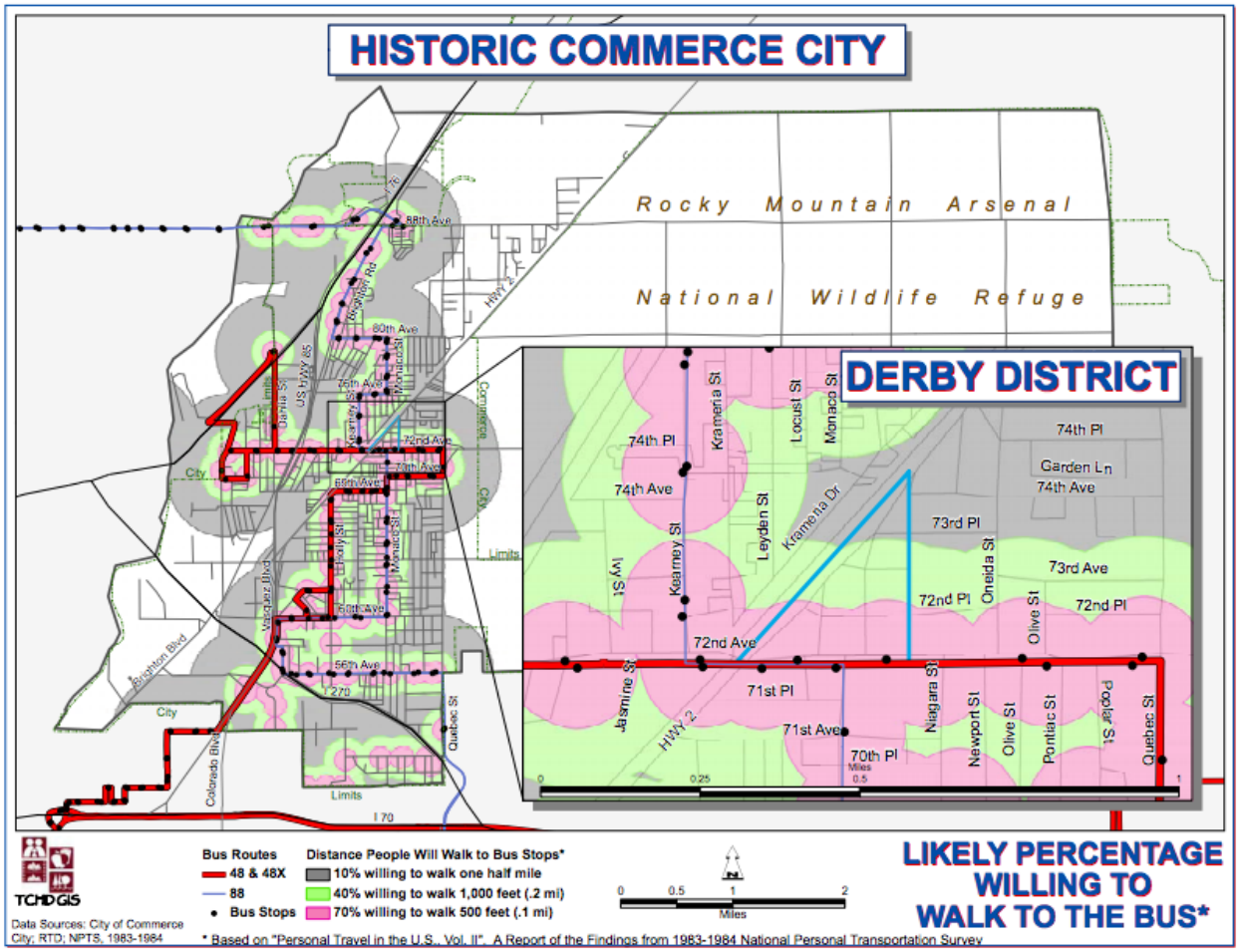
GIS evaluation

Geographic Information System (GIS) maps can illustrate potential impacts of a project or proposal by geocoding health data. Different maps can be used to develop threshold analyses for targeted health issues and help to predict those impacts. The United States Environmental Protection Agency has identified GIS evaluation as a best practice in health assessments (Rhodus et al. 2013).

The following websites provide examples of GIS threshold analyses:

- The Design For Health threshold analysis (http://designforhealth.net/hia/hia-threshold-analysis/)
- The Arden Hills appendices and background report (http://designforhealth.net/cases/arden-hills-2010-workshop/)
- The Commerce City, Colorado health impact assessment (http://www.tchd.org/DocumentCenter/View/544)
- The San Francisco Indicator Project (http://www.sfindicatorproject.org/)

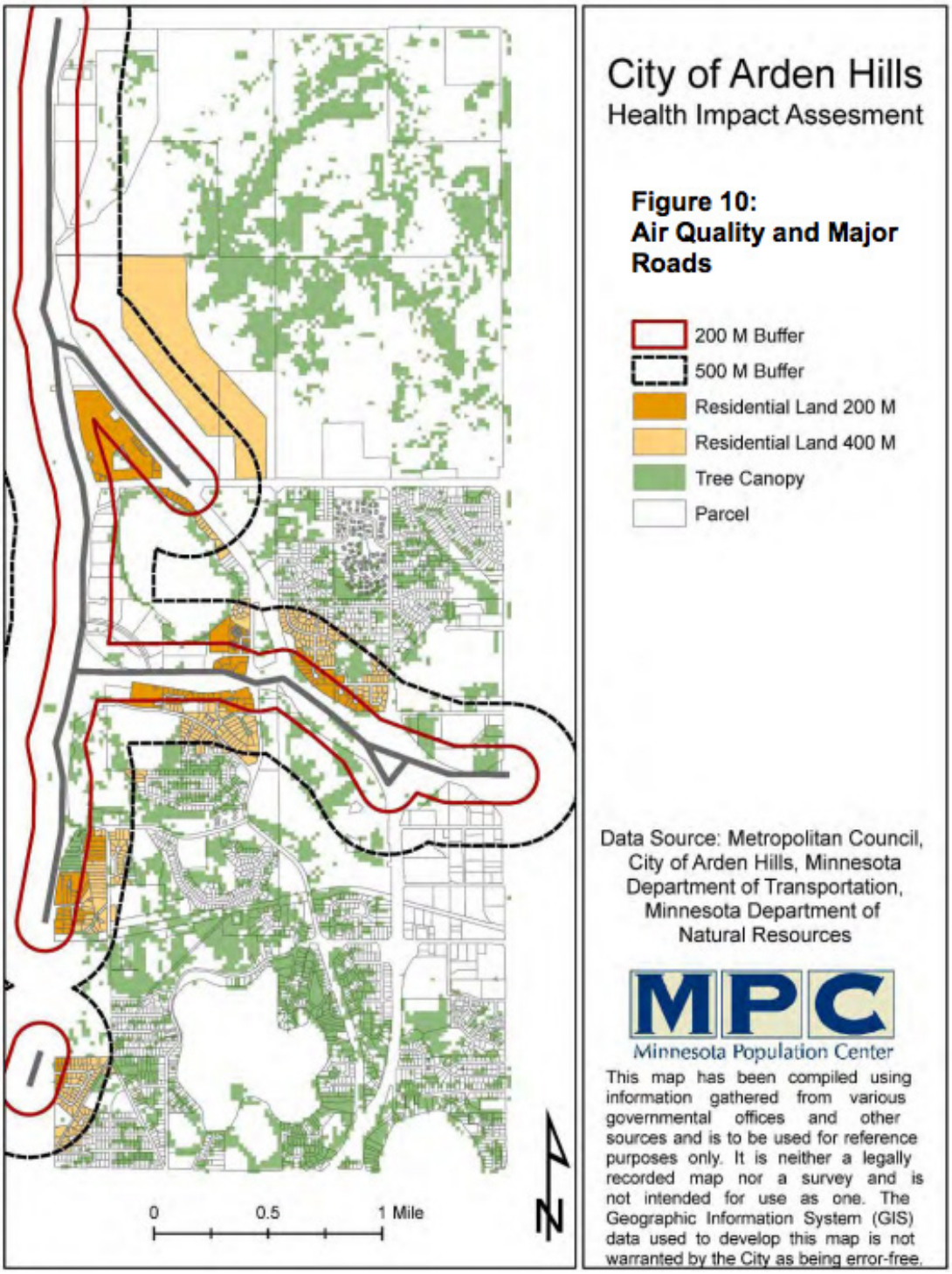
Figure 10. GIS Analysis Showing Residents' Willingness to Walk to the Bus



Source: Commerce City, CO HIA Report (Tri County Health Department 2007, 43)

PART 1: BACKGROUND REPORT FOR HAPI HEALTH ASSESSMENT WORKSHOP

Figure 11. GIS Analysis of Air Quality and Land Use for Arden Hills, MN HIA



Source: Forsyth et al. 2010, 64a. Used with permission.

PART 2: WORKSHOP LOGISTICS

Planning and implementing a health assessment workshop requires managing a number of logistics from start to finish, from creating a budget to allocate resources, to designating note-takers to capture the discussions and key ideas that arise on the day of the workshop.

To ensure the health assessment workshop goes smoothly, it has been noted in the prior section that steering committee members appoint a project manager to oversee the workshop logistics and delegate tasks so that the meeting details are in order.

A. What to prepare in advance of the workshop

- Budget
- Timeline
- Work plan
- Agenda
- Activities

Budget

A budget allocates resources for the health assessment workshop. Costs to factor in to a workshop budget may include:

- Room/meeting space rental
- Purchasing or renting meeting materials (paper, pens, etc.) and equipment (flip charts, overhead projector, TV/video, etc.).
- Food and beverage
- Professional facilitator
- Staff time
- Transportation (if needed)
- Child activities (if needed)

Developing the budget early in the planning process may determine parameters for hosting the workshop. For example, if the budget is tight and resources aren't available to rent a conference room, organizers can work with the steering committee to solicit a donated space to host the workshop.

Timeline

A timeline outlines different stages in the workshop planning process. It typically gives a broad overview of the workflow.

Table 3 provides an overview of general steps needed to plan and host a health assessment workshop (see also the process checklist on page 6). In this sample, the workshop planning process begins in September for a June workshop. It is possible to have a more compressed timeline (see Figure 2 in Tool 3, page 12).

PART 2: WORKSHOP LOGISTICS

Table 4. Sample Health Assessment Workshop Timeline

	Sept	Oct	Nov	Dec	Jan	Feb	Mar	April	May	June	July	Aug
Starting the Process												
Screening and scoping (Steps 1 and 2)	■	■										
Getting team in place (Step 3)		■										
Scout/select/reserve workshop space (Step 4)			■									
Gathering information												
Compile background report information (Steps 5–9)	■	■	■	■	■	■						
Develop invitee list (Step 10)							■					
Prepare and send save-the-date email (Step 11)							■					
Prepare and send formal invitations (Step 11)									■			
Manage RSVPs (Step 11)							■	■	■	■		
Send background materials to participants (Step 11)									■			
Running the Workshop												
Develop workshop agenda (Step 12)									■	■		
Develop workshop activities (Step 13)									■	■		
Order food and beverage (Step 14)									■	■		
Send email confirmations to all participants (Step 14)									■	■		
Writing the Results and Moving Forward												
Compile workshop results (Step 15)										■	■	
Formalize final health predictions and recommendations (Step 15)										■	■	
Write report (Step 15)										■	■	
Present, share, and publicize report (Step 16)											■	■
Evaluate the process (Step 17)											■	■

PART 2: WORKSHOP LOGISTICS

Workplan

A workplan is a detailed outline of all the tasks that need to be accomplished for the workshop, and assigns staff to complete each task by a set deadline. Creating the workplan can be a useful exercise in the early stages of the workshop planning process because it allows the organizer to think through all the steps—from start to finish—that are necessary to ensure the workshop is a success. The following are examples of key tasks to include in the workplan. Note that for each key task, there may be multiple sub-tasks included in the workplan.

Steps 1-3: Starting the Process

Happens before the workplan development

Step 4: Planning the overall tasks and timeline of the health assessment workshop

- **Create a communications and reporting plan.** Decide how and when the information will be communicated to workshop participants, and later, to the larger public.
- **Identify and book workshop venue**. Workshop location should ideally be neutral and acceptable to various constituencies (not affiliated with one group or another), and convenient for participants to get to. The interior layout should be flexible to accommodate a variety of different activities and exercises. The workplan may designate specific members of the steering committee to vet locations for the event.
- **Schedule the event**. Once the space is booked, the date and time of the workshop is fixed so it is a good practice to double check that the date that doesn't fall on a religious holiday or interfere with community events that may prevent participants from attending.
- **Select meeting facilitator**. When scheduling the workshop, it is also important to identify a meeting facilitator that is available. The facilitator's job is to make sure the meeting objectives (outlined by the steering committee) are met, that participants are engaged in discussions and have opportunities to share their ideas, and that the workshop follows the agenda.

Steps 5-11: Gathering information for a health assessment workshop

- **Compile the background report** (steps 5–9). Gathering the information for the background report is a timely and research-intensive process. Because there are multiple components to the background report (area profile, inventory of existing plans and polices, developing the agenda, etc.) the workplan can outline tasks needed to complete each section of the background report and designate staff responsibilities so that the workload is distributed fairly. The workplan can also help to ensure that efforts to write the report are coordinated (if multiple authors are involved).
- **Select workshop participants** (step 10). Determining who, and how many people are invited to the health assessment workshop is a very important issue, as workshop participants should represent a range of knowledge bases and opinions.
- **Send workshop invitations and track RSVPs** (step 11). Tracking RSVPs for the workshop is necessary because if a full range of stakeholders can't attend, missing voices can be filled prior to the event.

Steps 12-14: Running the Workshop

- **Develop workshop agenda and questions** (step 12). Rapid health assessment workshops are often three to four hours long. Agendas usually include:
  - An introduction to the project or place of interest
  - Participants discussing and prioritizing health impacts
  - Concluding with top recommendations to influence positive health outcomes in the project or proposal
  - See Figure 15 below
- **Develop workshop activities** (step 13). Unless they are very small, 10 people or less, some parts of the workshop may be conducted in smaller working groups.
  - See examples (Figure 12 and Table 4)
- **Running the event** (see Part 2, section B, page 28)

Steps 15-17: Writing the Results and Moving Forward

(see Part 3, pages 30–31)

PART 2: WORKSHOP LOGISTICS

Figure 12. Sample Workshop Agendas and Questions

Version 1

Registration Activity: Graffiti wall

- What does health mean to you? - or - Why is health important? (on Post-its)
- Voting task: Vote with dots on provocative statements about health effects—4 dots, for the statements people think are most important. (30 min)

Together: Introduction and presentation about the proposal, plan, or place; and current conditions (30 min)

Task 1 in small groups: What are the major health effects, positive and negative? (30 min)
This works well if individuals first fill in a worksheet that asks the following questions:

- What is the nature of the impacts on health, positive and negative, arising from the implementation of this proposal?
- What is the scale and significance of the impact (widespread, versus specific)?
- What will the frequency of the health effect be (or continuous)?
- Will the impact be in weeks, months, or years? What are the short-term risks versus long-term benefits?
- A map also helps

Task 2 in same small group: Prioritize the top three of each (positive, negative) (may vote with dots) (5 min)
Together: Share with other groups (15 min)

Task 3 in small groups: What changes can be made to enhance the positive and reduce negatives? (20 min)

Task 4: Prioritize top 3 of each (positive, negative) (5 min)
Together: Share with other groups briefly (15 min)

Task 5 in small groups: Identify (a) first steps for high priority changes and (b) who could make the changes (20 min)
Together: Discuss results and next steps (30 min)

Version 2

Registration Activity: Graffiti wall

- What are 3–5 words that come to mind when you think of a healthy environment?

Together: Introduction and presentation about the proposal, plan, or place; and current conditions (30 min)

Task 1 in small groups:
This works well if individuals first fill in a worksheet that asks the following questions:

- What will [place] be like (in terms of health) in 20 years with the current proposal? (30 min)
- What will [place] be like (in terms of health) in 20 years if no changes are made/trends continue?

Task 2 in same small group: What would you like [place] to be like in 20 years? (5 min)
Together: Share with other groups (15 min)

Task 3 in small groups: How do we get from the current future(s) to the desirable future? (20 min)

Task 4: Prioritize top 3 of each (positive, negative) (5 min)
Together: Share with other groups briefly (15 min)

Task 5 in small groups: What are the first steps to accomplish the desired future? (20 min)
Together: Discuss results and next steps (30 min)

PART 2: WORKSHOP LOGISTICS

Workshop Activities

Table 4 provides some activities that have been used during health assessment workshops to encourage participation and questions elicit discussion among attendees.

It helps to mix individual activities, small group, and large group activities. It is also useful to both generate ideas and prioritize those ideas in order to craft top recommendations on promoting positive health outcomes in the plan or proposal.

The following table lists several activities that have been used during health assessment workshops to encourage participation among attendees, with a description of each of the activities.

Table 5. Sample Workshop Activities[1]

Activity	Description
Graffiti Wall (individual or group)	• Can prioritize with worksheets individually, and then put up on a wall • Participants respond to one or more questions by writing on a board or flip chart to be viewed by entire audience. • They can participate in a "gallery walk" to view others' responses, add their own ideas, and take notes independently. • If done individually, it allows each person to have input and prepare their thoughts allowing even quiet people to have a voice.
Prioritization Activities (group)	• Different statements are placed on boards or flip charts, which can be located throughout a room. • Participants place sticker dots or other markers to "vote" on the statements they prioritize or agree. • Alternatively, participants can manually rearrange the statements posted on the wall so they are ranked according to importance, as reflected by participants.
Small group discussions	• Attendees form groups of 5–6 to respond to a question or brainstorm ideas. • The facilitator can alternate between periods of whole room share-outs with additional periods of small group discussion of additional or follow-up questions.
Presentations	All participants are gathered together either to hear input from the workshop facilitator or invited speaker.
Strengths, Weaknesses, Opportunities, and Threats (SWOT) Analysis	• By breaking into small groups, and rotating through each category, participants can give input on the health strengths and weaknesses of the area of interest (or proposal), as well as external opportunities or threats to those health topics or issues. • Version 1 agenda is loosely based on this point
Future Visioning	• Participants can brainstorm how they think their town or city will be if no changes are made and current trends continue. • Likewise, they could speak to how they would ideally like their town or city to be in 5, 10 or 20 years. • What can we do to reach that ideal future? • This is particularly good for getting people to move beyond immediate concerns. • Version 2 agenda is loosely based on this point
Mapping exercises	• Using existing maps of the area, participants can mark various areas that have positive or negative impacts on health. • They can also mark areas that should not be changed (protected), areas needing minor change, or areas needing major reform. • There can be separate maps made for different topics: anything from air quality, to quality of bike infrastructure, to lighting.

1. Chadderton et al. 2012; Forsyth 2007; Ison 2002

PART 2: WORKSHOP LOGISTICS

B. What to prepare for the day of the workshop

There are several workshop logistics that should be coordinated (or double checked) a few days prior to the health assessment workshop. These logistics, while short-term in nature, are equally important to include in the overall workplan so they are not overlooked.

Remind participants of workshop

Sending a reminder notice to workshop participants to confirm the workshop can encourage participants to read through (or re-read) the background materials and be prepared for the discussions during the workshop. Details worth including in the reminder:

- Date/time of event
- Location address (transit options, parking details)
- Agenda

Confirm food and beverage order

Workshop organizers should follow-up with the vendor(s) to ensure that the food and beverage orders are confirmed if applicable, and that there are food options for those with dietary restrictions.

Delegate staff assignments

It is important that staff involved in the health assessment workshop have clear roles and responsibilities during the event.
For example:

- Greeting participants as they arrive
- Facilitating small group discussions
- Photographing the event
- Monitoring time so the event is running on schedule
- Note-taking to document the process

If possible, hold an in-person staff meeting at least one-week prior to the workshop to go over these assignments and address questions.

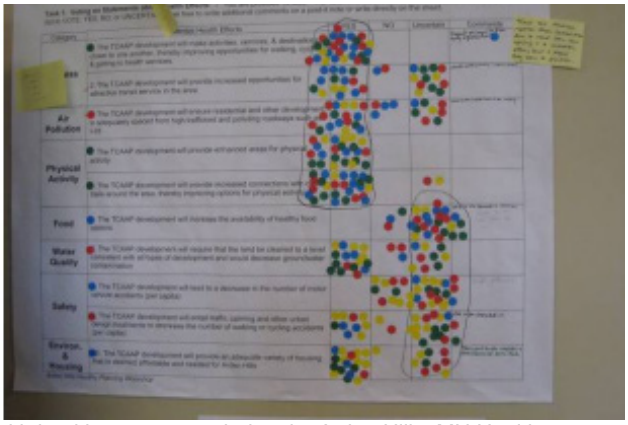
Arrange meeting space

Prior to the meeting (day before or morning of), the organizer and other staff members should do a walk-through of the meeting space to make sure everything is in place for the workshop. Things to consider:

- Is there a registration table for participants to sign-in and receive a nametag?
- Are there enough chairs to accommodate the number of participants that RSVP'd?
- Is there appropriate signage to direct participants to the meeting room? Bathrooms?
- Has the audio/visual equipment been tested before the event? If using a laptop and projector, or microphone(s), are they working?
- If there are workshop activities requiring flip chart, markers or sticker dots, are they arranged in the room appropriately?

Create workshop materials

- Worksheets, handouts to be filled in individually or collectively
- Information for participants (background report materials)
- Presentation(s)



Photos by Ann Forsyth

Participants vote their agreement, disagreement, or uncertainty with health statements during the Arden Hills, MN Health Impact Assessment.

PART 2: WORKSHOP LOGISTICS

Figure 13. Example Worksheet for Stakeholders to Assess Direction of Health Impacts

Health Category	Issue	Will have a **POSITIVE** Impact on Health	Will have a **NEGATIVE** Impact on Health	Important Issue, but uncertain (too difficult to say)	Comments
Air Pollution	Auto driving to access residential and commercial activities				
	Placing development close to I-35 (residential or other)				
Accessibility	Making activities, services, and other destinations closer to one another				
Physical Activity	Ability to provide transit service				
	Connecting trails within the region				

Source: Arden Hills, MN HIA (Forsyth et al. 2010, 28)

Figure 14. Commerce City HIA Workshop Included Participatory Mapping with High School Students

Source: Commerce City, CO HIA (Tri County Health Department 2007, 43)

PART 3: OUTLINE OF FINAL REPORT FOR HAPI WORKSHOP

The final report is the primary means that the discussion points, ideas and recommendations generated from the health assessment workshop get relayed to the attendees, the general public (e.g. online), and decision makers involved in implementing the project or proposal.

Knowing the audience of the final report will help inform a balance between providing detail and summaries from the meeting. For example, elected officials may not have time for a detailed account of the entire meeting and will want only a broad overview, key recommendations, and next steps. Graphs, tables, and bullet points can illustrate information from the workshop just as well as a long paragraph description could. In many sections, the final report may recap information included in the background report.

The following is an example outline that can be used for the Final Report:

I. Executive Summary
- Overview of proposal
- Workshop approach
- Key recommendations

II. Introduction
- Proposal key features
- Results from the Screening Survey of Health in Place (SSHIP) (or other screening tools)

III. Reasons for a Health Assessment

IV. Workshop Format
- Workshop description (basic approach, people invited, information available, proposed outcomes)
- Workshop agenda

V. Results
- Challenges and opportunities presented as a result of the project or proposal
- Potential positive and negative health effects of the project or proposal
- Effects that are most likely to occur, or are of greatest priority to stakeholders
- The affected parties
- Recommendations to change the project or proposal to protect and improve health

VI. Testing the Recommendations
- A reflection on whether the results actually identified important effects and had useful recommendations.
- Some kind of analysis of extra steps needed
- Data gaps, strengths, limitations

VII. Monitoring and Evaluation
- Suggestions about the monitoring and evaluation of indicators and outcomes to detect health gain
- Monitoring or evaluation plan for implementation (even a minimal one)

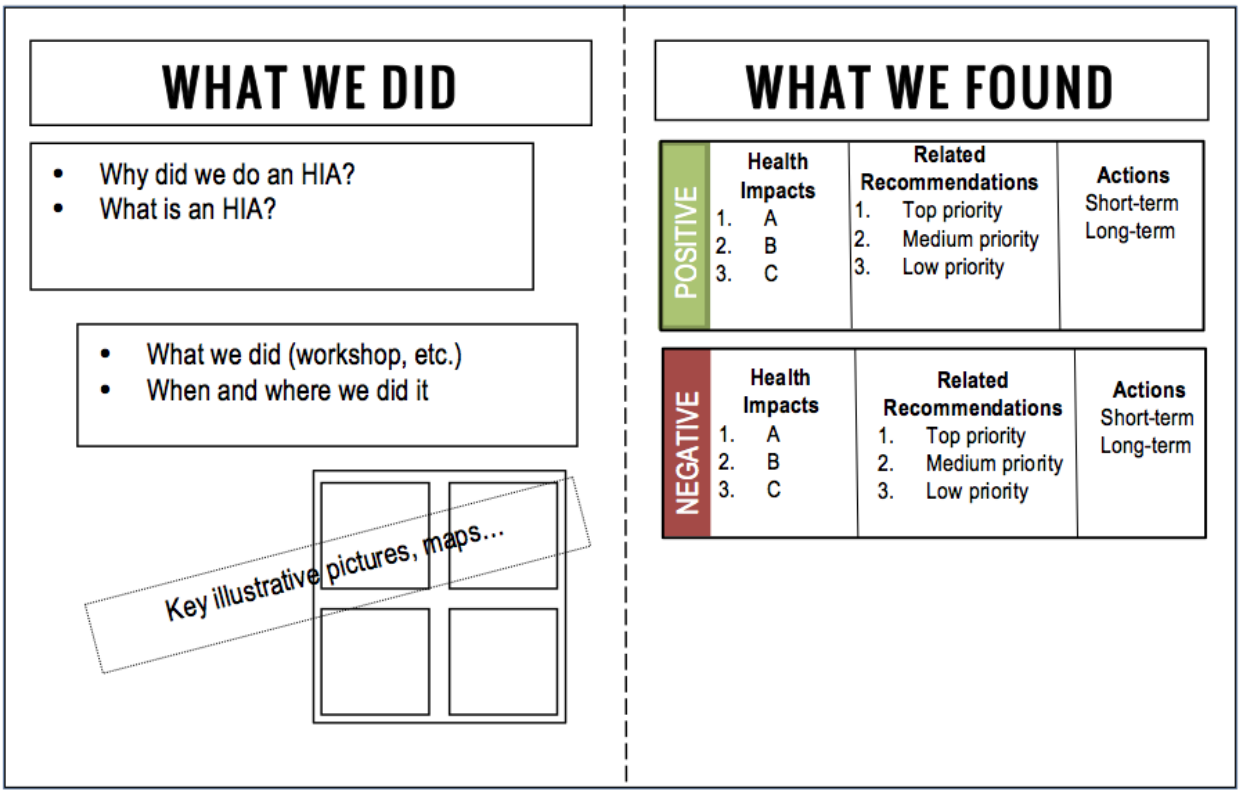
VIII. Appendices
- Steering group members and roles, funding sources, sponsors
- Personnel involved in preparations for the workshop and leading the workshop, and their roles
- Workshop participants, including affiliations
- Responses on the graffiti wall
- Profile of the area (see previous section)
- Clear documentation of methods: screening/scoping tools, worksheets, etc.
- Summary of the evidence base relevant to the proposal (http://research.gsd.harvard.edu/hapi/ provides a number of research summaries and links to other information)
- Summary of the experience base relating to the proposal; that is, other local health assessments or health assessments on similar projects in other locations

PART 2: WORKSHOP LOGISTICS

Good examples of final reports include:

- SR 520 Health Impact Assessment (2008)
- Page Avenue Health Impact Assessment (2010)
- Health Impact Assessment, Derby Redevelopment, Historic Commerce City, Colorado (2007)
- Mac Arthur BART Transit Village Health Impact Assessment (2007)
- Arden Hills City Planning Workshop Summary Report Appendices (2010)
- Devens Health Impact Assessment (2014)

Figure 15. Final Report Executive Summary Template



APPENDIX 1: DATA SOURCES

Table 6. Data and Potential Sources for Area Profile

Category	Data	Source
General	• Basemaps • Parcels • Local and regional political/administrative boundaries • Land use, land cover (zoning, etc.) • Agriculture	• ESRI, Google Maps, Regional GIS offices • Local municipality, assessor's databases • GIS clearing houses, local or state GIS departments • National agricultural statistics or census departments
Population and Demographics	• Population • Census tracts • Demographic or income data (e.g. gender, age, poverty)	• Census data • Local surveys • Government
Built Environment	• Streets • Buildings and Building attributes • Sewers • Impervious surface • Water Quality monitoring stations • Oil and Hazardous materials sites	• GIS clearinghouses • Local or state planning offices • Local or municipal public works departments • Local or state GIS offices • Assessor's Database
Connectivity	• Walkscore • Bike trails • Transit nodes • Transportation (e.g. airports, water taxis, ferries, roads, bus routes and stops, parking lots, rapid transit, seaports, trains) • Community resources (e.g. hospitals, schools, libraries, fire stations) • Emergency service zones	• Walkscore.com • GIS clearing houses • Local or regional GIS departments • Local or regional transportation agency • Local or regional planning agency • Local, regional, or national emergency service department
Natural Environments	• Open Space • Elevations • Hydrography and inland water features (e.g. watersheds, wetlands) • Coastal and marine features • Conservation/Recreation (e.g. areas of environmental concern, bike trails, hiking trails, protected open space)	• GIS clearing houses • Local or regional GIS departments • Geological surveys • Government agencies

APPENDIX 2: TOOL DEVELOPMENT

Ann Forsyth

In 2006-2008, I co-developed a set of health impact assessment tools through the Design for Health project. One of them was a workshop format, the Design for Health Rapid Health Impact Assessment Toolkit modeled on the various versions of the Merseyside model of the rapid health impact assessment (Scott-Samuel et al. 2001). The classic model is the Ison (2002) Rapid appraisal tool for health impact assessment: A task-based approach, a 160-page manual proposing, in great detail, a specific approach. The detail seemed in part to stem from the audience for that manual—those in public health—who may not have had much experience in public process. For our health assessment, aimed at planners with experience in participation, we pared down those instructions and generally simplified the approach.

As I reflected on the tool and used it in some places, it seemed to me that health assessments could be conducted far more flexibly. However, it was also a problem if health assessments became too flexible and omitted some of the benefits of systematic assessment that the EPA points out are too often missing from health assessments in the USA (Rhodus et al. 2013). This tool tries to find a middle ground.

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