

*Health Impact Assessment Toolkit for Planners*



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**American Planning Association**

*Making Great Communities Happen*

Cover: *Bike racks in Columbus, Indiana* (Source: Joel Philippsen)

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## USING THIS TOOLKIT

This toolkit is the third and final component of a series of products that comprise [APA's HIA and Planning project](#). Health impact assessment (HIA) is a process that brings public health considerations into decision making and offers opportunities for collaboration among planners and public health professionals.

These documents detail planning HIAs that have been carried out across the country and provide guidance for communicating about HIA with other planning professionals, partner organizations, and decision makers.

- The first element is the recently published report, [The State of Health Impact Assessment in Planning](#), which provides an overview of HIAs in planning, including in-depth descriptions and case studies.
- The second publication is an issue brief, [Health Impact Assessment Can Inform Planning to Promote Public Health](#), produced in collaboration with the Health Impact Project. This brief introduces planning directors and staff as well as policy makers to HIA.





Planners can address access to healthy food through health impact assessments. (Source: thinkstockphotos.com | istock | kazoka30)

- This toolkit builds upon the findings in the report, and is intended to guide planners who are ready to start an HIA. This toolkit provides guidance for planners on how to move from “considering an HIA” to “conducting an HIA” within the context of the community and plan, project, or policy that the HIA will assess.

While academic institutions, nonprofits and community organizations, and local health departments often carry out HIAs, planners are well situated to initiate and lead the HIA process. Accordingly, this guidance is designed for planners who intend to lead the HIA process.

### How this toolkit is organized

The toolkit begins with background about the overlapping values between HIA and planning, and an overview of HIA generally. Next, the toolkit employs a conceptual model to demonstrate how HIA can add value to the planning process at various points in the planning process. Then the toolkit provides guidance on each of the six HIA steps, focused on guiding planners through this process. Finally, the toolkit concludes with advice from HIA practitioners, ideas for other ways to integrate health into planning, and an appendix with links to resources.

## INTRODUCTION

HIA is a rapidly growing field that positions decision makers to make better choices by bringing together scientific data, health expertise, and public input to identify the potential and often overlooked effects, both positive and negative, of proposed laws, regulations, projects, policies, and programs on public health (Health Impact Project). HIAs provide pragmatic, evidence-based recommendations about how to reduce risks, promote benefits, and monitor the health effects of the implemented decision (National Research Council 2011).

HIA is a systematic, six-step process that determines the potential health effects of a proposed action, such as a plan, policy, or project. The process incorporates multiple data sources and analytic methods, and considers input from community members, residents, experts, and other stakeholders to identify potential health impacts and how those impacts might be distributed within the population (International Association for Impact Assessment 2014).

### Role of planning to improve health

The places where people live, work, and play influence many of the nation's most pressing public health determinants—such as levels of income and education and exposure to violence—as well as health outcomes, including respiratory illness, cardiovascular disease, injury, and mental health (National Research Council 2011). Planning professionals are in a unique position to promote public health through their work. For example, a jurisdiction's land development patterns and zoning policies can directly affect important health determinants, such as the availability and affordability of housing; the presence of pedestrian-friendly neighborhoods; the range of transportation options; levels of crime in a community; and access to education, employment, and other essential goods and services (Rossen and Pollack 2012).

Planners can help jurisdictions anticipate, design, and implement spaces where people live, work, and play in a manner that reduces air pollution, encourages physical activity, provides access to essential services, and preserves green space, all of which are important to health. Additionally, planners can help ensure that health is a priority in decision making across a range of sectors, because they often work in multidisciplinary teams with other specialists, such as engineers; architects; landscape architects; real estate developers; and transportation, law enforcement, housing, and economic development professionals.

### HIA in planning

Planners are well positioned to initiate or lead planning HIAs as they are often collaborators in their communities and are responsible for planning processes. To date, public health professionals have initiated and led most planning-related HIAs, but they have often brought in planning professionals as part of the HIA team or an advisory group. Many planning professionals have found that HIA is an effective way to integrate the fields of planning and health through assessing the health impacts of a specific plan, policy, or project. In the period between 2004 and 2014, one-third of all HIAs completed in the United States evaluated planning decisions, defined as the plans, policies, and actions that govern how the built environment impacts an entire population in a specified geographic area. Because there is such a strong relationship between the built environment



*Planners are well-positioned to assess the how proposed plans, policies, and projects might impact health determinants, such as active lifestyles. (Source: © thinkstockphotos.com | PureStock)*

and population health, it makes sense for planners to not only be involved in HIAs, but to take a greater leadership role. Accordingly, this toolkit offers planners some background and advice from experienced practitioners about navigating the HIA process.

## HIA AND PLANNING'S OVERLAPPING VALUES

### Sustainable development

HIA provides a way to critically assess how plans, policies, and projects will affect sustainable development to meet the needs of the current population without compromising the ability of future generations to meet their needs (World Commission on Environment and Development, 1987). Planners consider the three Es— protecting the environment, developing economic prosperity, and promoting social equity—in programs and initiatives. Public health is tied to environmental health, and economic opportunity and social equity are social determinants of health. Creating communities where people can live healthy lives is intrinsic to a sustainable community. HIA takes a broad approach to consider the social, economic, and environmental factors that affect health.

### Interdisciplinary

HIAs create opportunities for planners, public health professionals, community stakeholders, and decision makers to work together to consider the health impacts of plans, land-use policies, and planning-related project actions. The initial collaboration that arises from the process of conducting an HIA can build strong relationships and the capacity for future partnership, which can lead to long-lasting collaborative efforts between planning and public health.

### Community inclusion

HIAs emphasize inclusivity and community engagement. Planning and HIA professionals share a commitment to engaging with a diverse range of stakeholder groups—including the communities likely to be affected by the decision at hand—and considering how the decision may disproportionately benefit or burden specific population groups such as seniors, children, and low-income families. The HIA process creates opportunities to leverage the assets of each field, while also bringing together additional people and resources to support intentional and democratic community engagement.

### Data-driven

HIA can enhance planning decisions through improving and expanding the breadth of data used in the decision-making process. Planning and HIA professionals use data to inform decision making and establish priorities for action. By bringing health and planning professionals together through a systematic process, HIAs expand the data sources and analytic techniques that can be used to create a more complete picture of the implications of planning decisions.

### Monitoring and Evaluation

HIA brings together data from health, planning, and other fields. The interdisciplinary nature of HIA results in data from multiple sectors, combining planning and public health data in the same analysis. This demonstrates the potential to continue to monitor and evaluate the impacts of planning on health—for specific plans, projects, and policies that HIA teams assess, as well as future scenarios. While planners often make projections and predictions about future growth, population, and economic trends, planners can do more to also evaluate how planning decisions affect long-term health trends.



## OVERVIEW OF PLANNING HIAS

The content in this overview, and more, is also available in the issue brief, "[Health Impact Assessment Can Inform Planning to Promote Public Health](#)."

### Who

HIAs involve a range of stakeholders, such as decision makers, elected and appointed officials, planners, public health practitioners, business owners, residents, and community members, as active participants in the process.

HIA teams are generally composed of a core team, and typically involve other partners and stakeholders, including representatives of different sectors affected by the plan, project, or policy through advisory committees or panels. The core HIA team is typically a group of several stakeholders, and engages a wider group of stakeholders and community members in advisory committees as well as through strategic community engagement and data collection efforts. Planners can initiate and lead HIAs. They can also play various roles in assessments depending on their interest and capacity, including being an audience for the information and recommendations, participating on advisory committees, and collaborating with health professionals or other partners on the assessment. Often, planners also provide key technical expertise on planning matters as part of the HIA.

### What

HIAs take into account environmental, social, and economic factors related to health and evaluate the potential impacts of a proposed project, plan, program, or policy on the health of the community. The HIA process occurs in six steps—screening, scoping, assessment, recommendations, reporting, and evaluation and monitoring—with stakeholder engagement at each phase.

### When

HIA methodically and proactively informs decisions under consideration, and can be used to influence any stage of the planning process, including visioning, goal-setting, and the creation and implementation of plans, policies, and projects, as long as the assessment is completed in advance of the decision it seeks to inform.

Knowing the plan, policy, or project timeline is critical to ensure that the HIA can be completed in advance of the decision it seeks to inform. It is important to reserve adequate time to disseminate the HIA report and recommendations, and use the findings from the HIA to influence next steps in the planning process.

### Where

Planning HIAs can assess health impacts of projects at the building, street, or neighborhood scale, or consider the health impacts of planning initiatives at a larger scale, such as local and regional plans and policies.

### Why

HIAs can help planning efforts protect and promote the health and well-being of the community and help ensure that health benefits and risks from decisions are equitably distributed. Planners create and strengthen vibrant, sustainable places, and HIAs can support that work by bringing to light potential unintended consequences and opportunities to promote health and making

recommendations to address risks and enhance benefits. HIAs' emphasis on community engagement can also complement the planning process and create buy-in for adoption and implementation.

## How

HIAs employ a variety of data sources, such as demographic and health information and input from stakeholders, to identify the potential health effects of planning decisions, with special attention paid to certain target populations such as seniors, children, and low-income communities. HIAs can be fairly quick, using a "rapid" or "desktop" model over a few weeks or months, or they can use a longer, more comprehensive approach, taking several months to more than a year to complete (National Research Council 2011).

## A note about HIA and EIA

As a type of impact assessment, HIA is comparable to Environmental Impact Assessment (EIA), but it is distinct from the EIA process.

Planners and developers who are familiar with required EIAs and the resulting Environmental Impact Statements know that it is a necessary step to comply with the National Environmental Policy Act (NEPA). At their discretion, states and jurisdictions might also have additional statutes or requirements. At the national level, the EIA process legally mandates the consideration of human health impacts as part of the scope (Centers for Disease Control and Prevention 2012). One of the core purposes of NEPA is to "promote efforts which will prevent or eliminate damage to the environment and biosphere and stimulate the health and welfare of man" (National Environmental Policy Act, 42 U.S.C. §§4321-4370f).

In practice, however, the way EIA incorporates human health is limited. For example, EIAs examining air quality considerations will not explicitly address why air quality is an important environmental concern for human health (e.g. poor air contributes to asthma, heart disease) or analyze how poor air might affect segments of the population differently. EIAs do not typically extend the analysis to include an analysis of health outcomes. Using the example of air quality impacts, a typical EIA will not predict how the changes in air quality will impact hospital admissions for asthma, for example. The importance to health is implicit and, as a result, often missed. EIAs do not typically address how changes to the built environment might interact with one another, or how those changes could impact social equity. Thus, as a tool that defines health broadly, HIA can complement the EIA process to illustrate a more comprehensive analysis of impact.

For example, in San Francisco, a routine EIA of a proposed demolition of an apartment complex did not show adverse impacts for residents. Following resident and tenant concerns that the assessment ignored human impacts, the Department of Public Health became involved with a more specific analysis of human and health factors. The HIA that resulted provided evidence for probable negative health impacts, "including psychological stress, fear, and insecurity due to eviction; crowding or substandard living conditions due to limited affordable replacement housing; food insecurity or hunger due to increased rent burdens; and the loss of supportive social networks due to displacement"—all of which supported community concerns and which had not been addressed in the EIA. In this example, like many others, time and effort could have been saved if such factors were included in the initial impact assessment (Bhatia and Wernham 2008).



*Soil extraction for testing of the Roseburg property in Mount Shasta, California. The testing is part of an Environmental Protection Agency Brownfields Grant. (Source: © 2016 Juliana Lucchesi (CC BY-NC 4.0), from the American Planning Association's Image Library.)*

Therefore, in nearly every case that an EIA is conducted, planners have an opportunity to enhance how health is examined—including the factors considered and why they are important, how they are measured, and the extent to which different populations are affected. Such an approach leverages existing resources, parallels community engagement steps, and can help build relationships across disciplines through the process of sharing and assessing information and developing recommendations to address negative impacts, or enhance positive ones.

## KEY OPPORTUNITIES FOR HIA IN THE PLANNING PROCESS

HIAs can be conducted on plans, projects, and policies at varying stages of concept development, drafts, and adoption. Taking into account the projected timeline for the proposals or decisions is important, as desktop and rapid HIAs can be completed within a couple of months, while comprehensive HIAs can take much longer. The Health Impact Project and APA developed a conceptual model (see Figure 1) that illustrates key phases of the general planning process, and how an HIA can add value to the related planning output at each phase.

### Timing the HIA

First, planners and partners must make the decision to conduct an HIA, convene the HIA team, advisors, key stakeholders, and community members to determine whether the policy, plan, or program is appropriate for an HIA. Then the team should determine the appropriate HIA approach given any time and budget constraints (e.g., whether to conduct a desktop, rapid, or comprehensive HIA).

HIA teams should develop a rough schedule or timeline for starting and finishing the HIA to be positioned to use the HIA findings and recommendations during decision making. It is important to create the HIA schedule based on actual dates associated with the plan, project, or policy. Determine what the HIA team wants to influence, and identify how much time is available.

HIAs typically start after alternatives are proposed but before the plan is approved. There is more time to conduct a comprehensive HIA if the HIA team begins earlier in the process. If the HIA team is still forming after a draft plan is proposed, there will be less time available, potentially necessitating a rapid HIA.

The HIA findings will be most likely to influence the plan if they are disseminated during the review period following a plan proposal. Then, stakeholders will have the opportunity to revise the plan to incorporate health-improving recommendations before the final plan is approved and adopted.

If the HIA findings are not available before plan implementation, the odds of influencing the plan are less certain. However, during plan revisions or the next planning phase, the community can still use the HIA as a resource.

Planners can use the conceptual model to time the HIA to align with established project timelines, expected policy changes, or scheduled plan updates. The diagram can also help planners understand the overarching benefits of HIA and contextualize the purpose of the HIA. This can help planners make the case for HIA. Effective messaging can contribute to a compelling narrative as they apply for grant funding to support an HIA, or communicate with community members about the benefits of conducting an HIA.

### Examples of how HIAs have been used to inform planning at different stages in the planning process

For many planners, reviewing completed HIAs on similar topics can help establish a vision for their own HIA. Completed HIAs (on similar or different topics) can also serve as templates from which to create their own HIA plan.

## HIA Can Add Value at All Phases of the Planning Process

### Key opportunity points for collaboration to promote health

HIA can add value to the planning process in four key ways: improving data, promoting citizen involvement, providing opportunities for cross-sector collaboration, and reframing contentious issues around shared health goals. It delivers these benefits by emphasizing health, equity, and community engagement as core values at every step of the planning process.

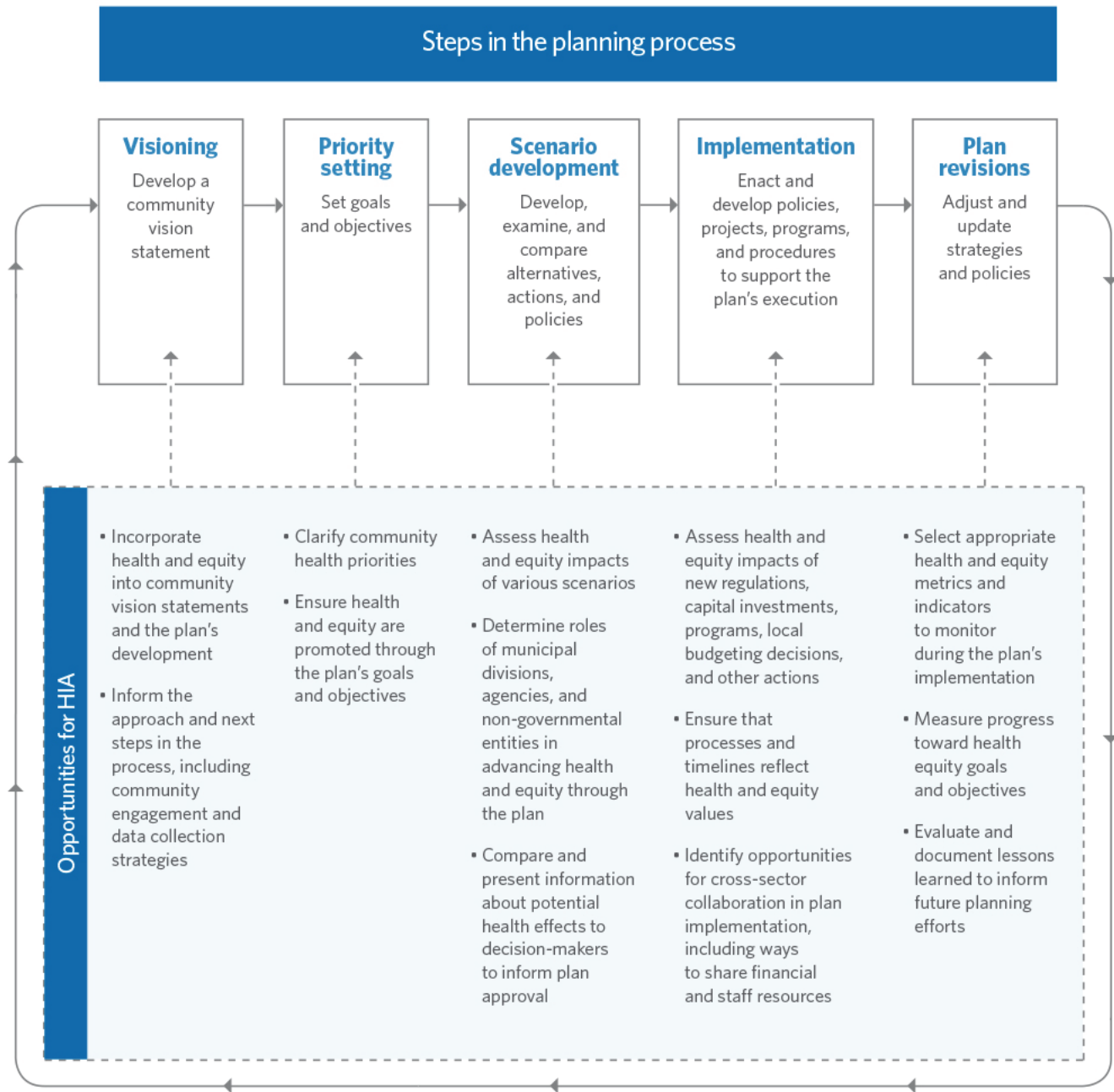


Figure 1: Pew Charitable Trusts and American Planning Association (2016). *Health Impact Assessment Can Inform Planning to Promote Public Health*. <http://www.pewtrusts.org/en/research-and-analysis/issue-briefs/2016/08/health-impact-assessment-can-inform-planning-to-promote-public-health>



**Priority Setting:**

- The [Davidson Universal Design HIA](#) looked at three “recommended efforts” to increase visitability and universal design in housing and potential health pathways and health impacts for each recommendation.
- The [Healthy Neighborhoods Equity Fund HIA](#) assessed the health impact of proposed new development projects. Then, it used the assessment to develop an instrument for the fund to prioritize which criteria to incorporate into the fund’s assessment of investment opportunities.

**Scenario Development:**

- The [planokc HIA](#) team assessed how Oklahoma City’s draft comprehensive plan would affect health under three different, realistic growth scenarios. (see Case Study in HIA and Planning Report) organized the
- The [Humboldt County General Plan Update HIA](#) evaluated how land use indicators related to health would change under three Plan alternatives.

**Implementation:**

- The [Assessing the Impact of a Proposed Transportation Utility Fee HIA](#) in Columbia, Missouri projected the impacts of an additional monthly utility fee (dedicated to transportation spending) on low- and fixed-income households.
- An HIA in Kansas evaluated the potential health impacts of implementation of a proposed policy. The [Potential Health Effects of Expanding Liquor Licenses to Grocery and Convenience Stores in Kansas](#) examined how the expansion could affect alcohol consumption, and how those changes might affect rates of traffic accidents, crime, STDs, and other health effects.

**Plan revision:**

- The Baltimore City Comprehensive Zoning Rewrite provided the context for the first HIA to evaluate the health impacts of a revision of a municipal zoning code in the U.S. The [Zoning for a Healthy Baltimore HIA](#) analyzed the differences between the current zoning code and the new draft code, focusing on aspects of the code most relevant to health impacts.
- The [Above the Falls HIA](#) in Minneapolis was timed “mid-stream” in the plan revision process, when the City and Parks Board had fresh interest on research into health impacts, and the HIA team had ample time to complete the HIA in advance of the plan approval process.

Although our research did not uncover HIAs specifically addressing visioning, there are certainly opportunities for planners to perform desktop or rapid HIAs at the earliest stages of the planning processes—and analyze how health is considered in the community’s priorities. As planning is an iterative process, there could be an opportunity for conducting a desktop HIA during the early visioning sessions of a plan revision. The visioning step in planning sets the stage for the rest of the process. While the “vision” is usually not a stand-alone document or process, this could be an opportunity for discussing how health can be embedded throughout the entire planning process (known as the Health in All Policies approach), and initiating an HIA on a more specific part of a plan, policy, or project.

## STEPS OF HIA

### Step 1: Screening

Screening is the initial step to decide whether or not to conduct an HIA. To assess the team's capacity to effectively conduct an HIA, review and discuss the following questions, developed by Human Impact Partners (HIP).

#### Checklist

- What is the decision target?
- What are the health issues?
- Why is an HIA warranted?
- Who are the decision makers?
- Who will be involved in the HIA?
- When will the decision be made?
- How will the HIA be used?
- How would your organization use the HIA, based on its specific strengths?

HIP's [readiness questions](#) and [worksheet](#) are great resources to guide teams through the screening decision.

Planning professionals considering whether to conduct an HIA should refer to the screening criteria described in guidance from the National Research Council. The criteria include consideration of the ways that planning decisions can influence health and of the time and resources available to complete the assessment. Even when planners choose not to undertake a health impact assessment, it is still possible to address important health issues (see *Alternatives to HIA on page 31*).

During the screening step, HIA practitioners must determine how to pay for the HIA process. Many HIAs have used grant funding and leveraged budgets from multiple organizations. Whether applying for grant funding or dedicating organizational resources to an HIA, it is important to plan ahead. HIA teams can also begin to think about community members and stakeholders to engage over the course of the HIA.

### RAPID HIA

Setting the stage for the HIA is important. Making the decision to conduct an HIA opens up many possibilities—communities might decide to dedicate time and resources toward a comprehensive HIA. However, in many cases, HIA teams will choose to conduct a Rapid HIA, which can reduce the pressure to identify external funding sources, hire additional staff, or develop a data-collection plan.

**RAPID HIA**

Keep it simple. Developing pathway diagrams can unlock new ideas and lead to new ways of understanding the relationship between a plan, policy, or project and health impacts. There are often several mediating impacts that are worthy of investigation, however the main output of this step is a research plan—so consider what is feasible for the team to address. In a rapid HIA, one strategy could be to prioritize the top two determinants to assess to maintain a feasible scope of work.

**Step 2: Scoping**

During this step, the HIA team and stakeholders identify the potential health effects that will be considered and develop a plan for completing the assessment, including specifying their respective roles and responsibilities. The HIA team, including stakeholders and community members, will convene and examine community health concerns or potential benefits that the plan, policy, or project raises. The team will develop pathway diagrams, sometimes referred to as causal models, that outline how the plan, policy, or project could directly and indirectly affect specific health issues. These diagrams help the HIA team prioritize which health effects to include in the assessment and develop research questions. Some HIA teams have conducted workshops to complete this step. Many teams have used collaborative group exercise techniques using sticky notes, easel pads, markers, dot stickers, whiteboards, and other creative materials to put pen to paper to develop the pathway diagrams.

These pathway diagrams will correspond with the research questions and determine the scope and methods for the next step (assessment). See more pathway diagrams on the [UCLA HIA-CLIC Pathways webpage](#), which has compiled published pathway diagram examples, organized by topic.

At this stage, the HIA team should also clarify the working relationship between team members, creating a structure that includes roles and responsibilities.

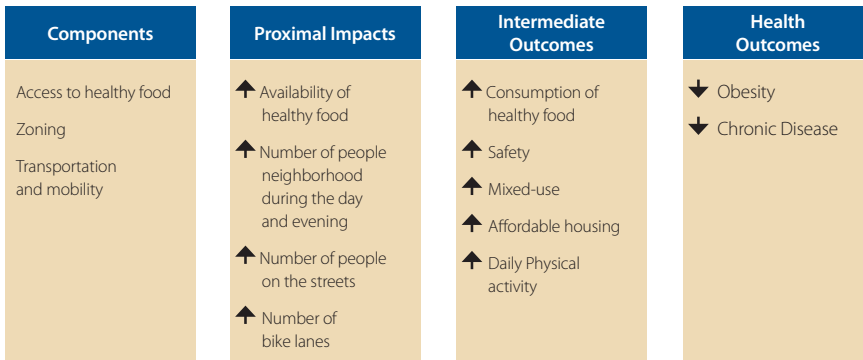
**Develop the research plan**

The primary outcome of the scoping process is a research plan that describes the health effects that will be considered in the assessment, outlines the research questions and methods that will be used to answer those questions, and describes the roles and responsibilities of the HIA team and stakeholders.

- Determine which plan, policy, or project alternatives the team will assess.
- Prioritize which health impacts will be considered in the HIA. During the scoping phase, many important potential impacts are discussed. It is important to align the scope of the HIA with the resources and time frame available, and stick to assessing two to five health impacts.
- Create specific research questions to guide the assessment, indicating which alternatives the team will assess, as well as the geographic boundaries of the HIA and the population groups that will be evaluated, including vulnerable populations.
- Determine which analytic methods the team will use. Many HIA teams use mixed-methods approaches, and include literature review, along with quantitative and/or qualitative methods.
- Draft the timeline and work plan for the steps following the assessment.

**Clarify specific roles and responsibilities within the HIA team**

Depending on the makeup of the team, it can be useful to establish a project manager and designate the leads for research, writing, and editing. Some HIA teams have included graduate students as key contributors, by hiring them as interns or collaborating with student teams enrolled in university classes or workshops.



South Billings Master Plan Health Impact Assessment. Available at <http://tinyurl.com/jq9f2kw>. Image Credit: RiverStone Health (2012).

The HIA team might also identify subject matter experts to strengthen the team’s expertise on the specific topics that the HIA will investigate. It is important to clarify their level of involvement in the HIA research, writing, and editing steps, as well.

HIP has compiled a fact sheet about [roles and functions](#) for HIA team members, and ideas for structuring your HIA team to ensure advisors can provide technical expertise, community experiences, and strategic direction.

**Determine how the HIA team will engage with stakeholders**

Effective HIA teams develop strong community advisory boards or steering committees, comprised of stakeholders with a range of perspectives, such as community members who will be affected by the decision and representatives from relevant community organizations and public agencies.

Some have also included elected officials, academics, developers, industry representatives, and service providers. These boards are a critical element of building buy-in for the HIA, and the eventual HIA findings and recommendations. The board serves as a platform for stakeholder input, a way to provide information and feedback to the HIA team and also a way to receive updates and information from the HIA team. It can also play functional role in the HIA process through participating in the six steps.

**Determine stakeholder meeting schedule and objectives**

Engaging the board or committee is critical, though achieving the appropriate balance of information flow, time commitment, and level of involvement can be challenging. Set expectations early on by creating a regular meeting schedule and sharing the proposed HIA timeline and potential tasks with stakeholders.

## RAPID HIA

In a rapid HIA, the team must negotiate the benefits of engaging the community through participatory assessment methods and the cost of time necessary to do so. Rapid HIA teams must also balance the benefits of collecting new quantitative data to match the needs of the HIA with the costs of doing so. Again, focusing on a more narrow set of topics can expedite the assessment process as well.

There is no formula for a rapid HIA—it does not have to include X number of community meetings or Y number of data sources. Consider how to use more existing data and engage community members in a shorter time-frame, such as bringing together panels to discuss existing conditions and make qualitative predictions.

## Step 3: Assessment

The assessment will describe the current conditions, using quantitative and qualitative data, related to the priority health issues identified during the scoping phase. Using data and the best evidence available, the assessment will also forecast potential health impacts of the plan, policy, or project. Each HIA team handles the assessment differently, depending on the HIA budget, staffing, timeline, resources, and goals. In addition to the guidance provided in this document, planners can look at the library of completed HIAs available at the [Health Impact Project website](#), and review [The State of Health Impact Assessment in Planning](#) report.

These steps of the assessment phase are condensed from HIA Guide for Practice (Bhatia 2011).

1. ***Evaluate and weigh evidence of the associations between the proposed decision and health through a literature review.*** Conduct a literature review of the body of research that connects the health determinants and health outcomes of interest in your community's HIA. If the research is not specific to the health determinants of interest, consider research on similar topics or interventions. Synthesizing the evidence from peer-reviewed journal articles provides the context for the HIA and ensures that the predicted pathways between health determinants and outcomes are reasonable.
2. ***Collect and synthesize data on baseline conditions.*** The other element of the assessment is an analysis of the community conditions and the plan, policy, or project. The analysis methods can employ, for example, GIS mapping, focus groups, and cost-benefit analyses.
  - Summarize the data relevant to the HIA using the pathway diagram and literature review to guide the selection of measures for baseline conditions. Often, using trend data or comparing the community's measurements with peer communities or the state or nation provides additional context to the baseline conditions—and informs projections for future conditions.
  - When collecting the measurement data, it might be necessary to use proxies from publicly available sources of data to ensure that the measurements will continue to be available over time. In other cases, this step might be an opportunity to collect unique information based on any gaps found during the literature review, or to augment the available data.
  - The HIA team must also make sense of the health, demographic, and planning data. The team should find a way to summarize the data to tell the story about the community. Further guidance is provided in the Data section below.

## STAYING ON TRACK

HIAs assess the impacts of a project proposal, a plan draft, or a policy update as it is currently written. It is important to focus on a distinct proposal actively under consideration so that the assessment is specific and measurable. During the recommendation step, the HIA team will examine and propose mitigation alternatives and other ways to strengthen the plan, project, or policy's impact on community health.



**Figure 3: A Health Impact Assessment to inform the Healthy Neighborhood Equity Fund**

Health Determinant	Direction of Impact	Likelihood of Impact	Magnitude of Impact	Severity of Impact	Distribution	Strength of Evidence
Walkability/ Active Transport	+	Likely	Medium	Medium	Wide	++++
Safety from Crime	+	Likely	Medium	High	Wide	++++
Economic Opportunity	+	Likely	Medium	High	Narrow (those gaining employment)	++++
Food Access	+	Likely	High	Medium	Wide	+++
Traffic Safety	-	Likely	Medium	High	Wide	++++
Affordable Housing	+	Likely	Medium	High	Narrow (Residents of Affordable Housing)	++++
Green Housing	+	Likely	Low	Medium	Narrow (Residents of Green Housing)	+++
Green Space	+	Likely	Low	Low	Narrow (Those accessing new green spaces)	++
Social Cohesion	+	Likely	Low	Low	Wide	++++
Air Quality	-	Likely	Low	Low	Wide	++++
Gentrification/ Displacement	-	Possible	Medium	High	Narrow (Cost Burdened)	+++
Environmental Contamination	+/-	Possible	Medium	High	Narrow (Those living and working on site of remediation)	++++

*Metropolitan Area Planning Council, Transit-Oriented Development and Health: A Health Impact Assessment to inform the Healthy Neighborhood Equity Fund, 2013. Available at [http://www.mapc.org/sites/default/files/HNEF%20HIA%20Report%20v5\\_0.pdf](http://www.mapc.org/sites/default/files/HNEF%20HIA%20Report%20v5_0.pdf)*

3. **Characterize expected health effects, quantitatively where feasible. Indicate the certainty in health effect characterizations.** Using the findings from the literature review, assess the potential effects of planning-related health determinants by considering the following five characteristics:
- **Direction.** Is the impact positive, negative, neutral, or unclear?
  - **Magnitude.** How large is the expected effect?
  - **Severity.** What is the severity of the impact?
  - **Likelihood.** How certain is the effect to occur?
  - **Distribution.** Will the impact be shared equally among the exposed populations?

In Boston, authors of an HIA of the Healthy Neighborhoods Equity Fund summarized the wide range of health impacts concisely in a table (see page 17).

## Data

HIA is a data-driven decision-making tool, so it is important to choose data that are appropriate and feasible for the scope of the HIA. Planners have access to key data, but public health and other partners are gatekeepers of additional crucial data.

This toolkit includes publicly available data sources and indicators that can be adapted for planning HIAs in many communities. Quantitative data are valuable, and using publicly available sources from validated surveys ensures that it is reputable. It also enables planners to compare their jurisdictions to their peers, as well as to the state, region, and nation.

HIAs employ publicly available data, as well as specialized, local data, in a variety of combinations. Generally, HIAs use the following sources:

- Government reports
- Nongovernmental organization research and publications
- Data clearinghouses
- Academic literature
- Focus group data
- Survey data

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### DURING THE ASSESSMENT PHASE, IMAGINE THE REPORTING STEP

- What will you be able to say in the end?
  - Will it make people listen?
  - What will grab the media's attention? What will make it hard for decision makers to ignore?
  - Imagining the end of the HIA process will help prioritize indicators and data.
- 

Data is important to understanding the demographic and socioeconomic makeup, health status, health behaviors and health risks of a community. Data can also describe the built environment conditions. Using validated indicators is a great way to establish baseline conditions, and facilitate monitoring and evaluation using consistently updated data.

Choose data sources that are practical as well. What is feasible to measure, and what data is already being collected and monitored? These examples are not intended to be a fully a comprehensive list.

- Population indicator examples
  - **Demographic:** race and ethnicity; age; educational attainment
  - **Economic:** income; unemployment; proportion of jobs paying a livable wage
- Health indicator examples
  - **Health behaviors:** alcohol consumption; physical activity
  - **Health status:** food insecurity; obesity rate; asthma; low birth weight; mental health status

- Planning indicator examples
  - **Housing:** housing tenure; housing cost-burden; length of residency
  - **Environmental:** Tree canopy; total impervious surface area; proximity to landfills
  - **Access and equity:** proximity of parks; proximity to goods and services; fast food establishments within one-half mile of schools
  - **Transportation:** average vehicle miles traveled; transportation mode split; crash rates
  - **Water:** reliance on bottled water; septic tank management
  - **Policy indicators:** complete streets policy, shared use policy

Another data guide is HIP’s [Data Sources](#), a list of commonly used sources of data for HIA.

Qualitative data is also important in the assessment step of an HIA. Often, it provides additional context or nuance to quantitative data, making it more meaningful. So, quantitative and qualitative are often most meaningful when used collectively. Qualitative data can also function to “explain” quantitative data that warrants a deeper dive or elucidate the mismatch between what the numbers suggest and what people experience in reality. Perhaps most significantly for HIAs, qualitative research can summarize the perspectives of community members about how they perceive potential impacts of the plan, policy, or project.

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## TIPS FOR COLLECTING, USING, AND UNDERSTANDING DATA

Adapt for local context and resources:

- **Get to know community leaders:** Ask them about the best way to connect with the community members the HIA team is trying to engage.
- **Use proxy data:** Sometimes data is not available or updated, or the HIA budget will not allow for primary data collection. What are other sources of data that can serve as proxies?

Reach out to:

- Epidemiologists at the state and local health department (if possible, identify a local health practitioner)
  - Social science and public health researchers
  - Academia— relevant university research centers and departments in the region
  - Nonprofit organizations, which often have long-standing relationships with community members and leaders, in addition to research, evidence, or advocacy platforms
  - Social services agencies, which often also have deep knowledge of the communities they serve
-

*Students participate in a walk audit as part of the Plan4Health coalition activities in Columbus, Indiana. (Source: Joel Philippsen)*



Recommended methods for obtaining qualitative data:

1. Interviews with impacted residents and stakeholders
2. Focus groups with community members
3. Observation studies
4. Other qualitative resources

Additionally, planners and HIA teams might find that they would like to collect new data or create tailored indicators or indices. There are resources available for developing survey instruments and methodology for new quantitative data collection, and there are also guidelines for conducting original qualitative research.

Resources include

- [Research Methods Knowledge Base Qualitative Methods](#)
- [Best practices for combining qualitative and quantitative data](#)

## Step 4: Recommendations

At the culmination of the assessment step, the HIA team will use the findings to develop actionable recommendations for enhancing the plan, project, or policy to maximize the positive health impacts and minimize the negative ones. The recommendations translate the assessment findings into feasible alternatives or modifications to the proposed plan, policy, or project.

### Checklist

- Are the recommendations appropriate?
  - Are the recommendations based on community input?
  - Are the recommendations based on the best available evidence?
- Can the recommendations be implemented?
  - Are the decision makers well positioned to make the recommended changes?
  - Are the recommendations financially viable?
  - Are there regulatory barriers or issues to consider?
- How will the recommendations be implemented?
  - What are the actionable steps?
  - Who are the responsible parties?
  - What is the timeline?
- Do the recommendations align with the impacts identified in the assessment?
- Has the HIA team considered potential unintended consequences of the recommendations?
  - How have the recommendations been modified to mitigate potential negative impacts of the recommended strategies?
- Is each recommendation tied to the monitoring and evaluation plan?

## RAPID HIA

Just as there are many potential pathways to health outcomes, there might be multiple recommendations. In a rapid HIA, consider the highest priority health impacts and the highest-impact recommendation strategies. This way, if the window of opportunity is coming to a close, there will be a greater likelihood of adopting the most meaningful HIA recommendations.



## RAPID HIA

As with the previous steps, use the goals of the HIA to guide the reporting phase. Which dissemination channels will reach the intended audiences? What messages will be most effective? While there are models presented in this toolkit, there are undoubtedly creative and innovative ways to share the findings and recommendations—and HIA teams do not have to create sleek infographics or develop new web platforms to be effective.

## Step 5: Reporting

Translating all of the HIA work into a report does not have to be a daunting task. The [HIA Report Guide](#), a template developed by HIP, thoroughly reflects the six steps of the HIA process. However, there are many ways of effectively communicating the HIA findings, and it will be important to match the communications strategy with the intended audiences. For HIAs led by planners, the HIA findings might also be integrated into the plan, policy, or project documents.

### Publishing the HIA report

HIA reports document the HIA process, analysis, and findings, and include references. While it is important to create a transparent and thorough record, it does not have to be a lengthy document. Depending on the HIA's scope, the report might include more information in the appendices, along with maps, survey instruments and results, or other materials. The report can be a resource for decision makers community members, and advocates. Furthermore, the comprehensive document also allows people to access any piece of the HIA that might be relevant in other communities or to other topics in the same community.

Because HIA reports often include many pages of text, charts, and tables, HIA teams should consider additional ways to convey the key takeaways, such as executive summaries, interactive websites, and fact sheets. Like many reports, the goal is not to have it physically or virtually “sit on a shelf.” Consider your intended audience. What will compel them to pick it up and read it, or click on the link, and scroll past the introduction? How else can you share the report? Think about presentations and panel discussions with key audiences.

### HIA dissemination

**Online.** After publishing the report, and associated documents, the HIA team (including Advisory Committee members and partner organizations) should collaborate to ensure the HIA findings are shared across multiple channels. Writing blog posts, using social media, and posting on neighborhood and topical listservs are part of a good HIA report roll-out campaign. Using the web allows the greatest reach to all audiences, including the general public, though some key community members might not have consistent internet access.

In Bernalillo County, New Mexico, an HIA team assessed a Bicycle Safety and Action Plan. The HIA team created [a website](#) that includes all of the HIA reporting information, so that each section of the report is distilled and separated. It is interactive and engaging, and perhaps less daunting than a heavy report.

**In person—with affected communities and the general public.** It is critical to share the HIA findings with people who contributed their time and input, so use the HIA and HIA recommendations to report back to stakeholders and community members involved in the process.

Sharing the final HIA report, and verbally describing the findings at community meetings—such as regularly scheduled neighborhood association meetings—or planning committee meetings—such as a relevant advisory committee—is an effective way to report the findings. Community members are also great representatives to present on the HIA.



An HIA team in Omaha, Nebraska, produced a full HIA report, and designed additional materials for different audiences. This included a five-page issue brief, a one-pager, and this infographic. (Source: <http://www.douglascountyhealth.com/healthy-community/health-impact-assessments>)

**To decision makers.** HIAs provide additional information to decision makers in approving projects, passing new legislation, or adopting drafts of plans. HIA teams should plan for using the HIA as an advocacy tool and communicate HIA recommendations to decision makers, policy makers, planning boards, commissions, and city councils. Create a draft letter (or template) to decision makers and share with constituents.

**Other tips.** Follow the decision proceedings to ensure that the HIA recommendations are considered in the process. Work with community members and constituents to meet with their representatives, come to meetings, and schedule meetings with their elected officials. Equip them with materials to go into meetings with an agenda.

*Development and infrastructure can impact health in many ways. (Source: Carolyn Torma (CC BY-NC 4.0). © 2015 American Planning Association.)*



## HIA Examples

These HIAs demonstrate successful HIA projects and communication.

- [The Atlanta Beltline HIA](#): a catalyst for garnering attention, buy-in, and attracting further funding (CQGRD) .
- [Jack London Gateway HIA](#): a housing HIA that led to changes to protect a vulnerable community in Oakland (HIP)
- [Central Corridor Light Rail Transit Line HIA](#): a great example of a community-engaged process in Minneapolis (ISAIAH)
- [Farmers Field HIA](#): a prime example of a social equity-focused HIA about a proposed football stadium in Los Angeles (HIP)
- The [Baltimore-Washington Intermodal Facility HIA](#) included a great, concise executive summary that used bulleted and numbered lists for readability.

## Step 6: Monitoring and Evaluation

While reporting is a key milestone in the HIA process, it does not conclude the HIA. Monitoring and evaluation, the final step, evaluates the HIA process according to accepted standards of practice, tracks the impacts of the HIA on decision making, and monitors and measures the impact of the implemented decision on health determinants and health outcomes. This step includes setting up an evaluation framework and assigning responsibilities for monitoring and evaluation with HIA team and partners and creating a timeline and evaluation questions.

### Types of Evaluation

The process evaluation measures how well the HIA process adhered to HIA standards and how stakeholders perceived the effectiveness of the HIA process.

The outcome evaluation measures the how the HIA impacted the proposed plan, policy, or project; how the HIA impacted the key health determinants; and finally, how the implemented decision impacted health outcomes.

Some of the short-term outcomes include:

- How did the HIA affect the decision-making process?
- To what extent were the HIA recommendations adopted?
- To what extent were the HIA recommendations implemented?

The outcome evaluation will also measure the long-term:

- How have the health outcomes changed over time (pre-HIA and post-HIA)?
- How were health behaviors in the community affected?
- Were the health outcome goals achieved?

To answer the evaluation questions, choose indicators that can be measured. Then, determine which person or agency will be responsible for monitoring the indicator (collecting and documenting the measurements), and how often or when they should monitor the indicators.

Indicators will ideally align with those selected and used in Step 3, the HIA assessment. This allows the HIA assessment to serve as a repository of baseline measurements for the ongoing monitoring of certain health determinant and outcome metrics.

From the universe of possible indicators, select indicators that will demonstrate changes relatively quickly. Rather than focusing on the long-term health outcomes, such as mortality rates or obesity prevalence, include a mix of health determinants that will indicate a shift in population health in the coming years.

The HIA team should also identify responsible parties, timelines, and data sources for each indicator. How can team members continue to work together to monitor HIA outcomes? How can the HIA team use the data from the HIA monitoring and evaluation plan to sustain healthy planning in the community?

[An HIA of the 2010 Hawai'i County Agriculture Development Plan](#) includes a robust monitoring plan that can serve as a model for other HIA practitioners.

## RAPID HIA

Do not skip the final step of the HIA! Develop a monitoring and evaluation plan that leverages the data collected for the HIA, and builds upon existing relationships and organizational efforts to collect the data.



## ADVICE FROM THE EXPERTS: TIPS FOR CONDUCTING EFFECTIVE HIAs

APA has compiled a few “rules of thumb” to help planners get started on their HIAs. APA’s HIA and Planning Advisory Committee reviewed and contributed to these practical tips.

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The best way to prepare might be to ‘expect the unexpected.’

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### Create a (flexible) schedule

Factors such as available resources and the urgency of the HIA will determine how long an HIA team can spend on the HIA. The most strategic way to time the HIA is to work backwards from the external deadlines the HIA is intended to address. For example, is there a city council meeting or a planning board when there will be a decision about a proposed development? How much time does the HIA team have to produce recommendations in time for that meeting?

### How to prepare for when things don’t go as planned

Build in additional time for the unanticipated challenges—but don’t start too early. Plans, projects, and policies can change significantly and timing the HIA so it is relevant can be a delicate balance. Essentially, expect the unexpected and know that it is normal to break from the plan in some way.

For example, the time commitment for community engagement can be difficult to accurately predict. Generating buy-in and trust from the community takes time and authentic engagement from the HIA team. The HIA process creates an opportunity to leverage how planners already engage with the community, enabling residents of communities most likely to be affected to participate in a decision that will affect them. The HIA process is a way for planners to learn more about the health priorities of the communities they serve, and hear community perspectives on the plan, policy, or project. Facilitating this exchange of information requires patience and flexibility, as well as trust. You’ll have to wait to see what won’t work. For example, if you can’t find data for an indicator, you can decide to find another proxy, or simply drop it. Removing that one indicator is not the end of the world. Remember to keep the big picture in mind. At almost every step of the HIA, there are legitimate reasons why it might be challenging to stay on schedule. Three of the six steps are considered potentially more complex: scoping, assessment, and recommendations.

During **Step 2, Scoping**, bringing together stakeholders and prioritizing the purpose of the HIA can be a lengthy collaborative decision-making process. Often, disagreement surfaces at the early meetings with newly-established advisory committees. Creating a flexible time frame ensures that disagreements about priorities can be resolved respectfully and thoughtfully—without rushing to get through the difficult parts.

**Step 3, Assessment**, can expand and end up taking longer than anticipated. Data collection, analysis, and synthesis are time-consuming and in many cases, can open up new paths of inquiry. This process can also take longer due to lack of available data or difficulty finding evidence on the HIA issue. These roadblocks are common, so determining whether it is better to make do with what is available or pausing to redesign the scope or collect new data are all options—dependent on the HIA time frame and available resources.

As might be expected, **Step 4, developing recommendations**, can also require more time and resources than anticipated. Incorporating feedback from

diverse stakeholders might not lead to a clear set of recommendations; however, community engagement is important for this very reason. HIA provides a unique opportunity to synthesize different perspectives and conclude with health-promoting recommendations that are feasible. On the flip side, if the HIA team does not include any experts in the recommendation strategy areas, the process might move slowly. In that case, the HIA team sometimes chooses to engage outside consulting to prepare recommendations. Additionally, HIA teams can tap into networks like the [Society of Practitioners of Health Impact Assessment](#) to find out if others have run into the same problem before.

### **Forming the advisory committee, steering committee, or other group**

A cornerstone of the HIA team is typically one or more advisory committee, steering committee, or other group. A common way of organizing individuals and representatives from organizations is to bring together a single task force, though some HIA teams have developed youth advisory groups, or otherwise separated their stakeholders into more than one advising body.

When inviting people to participate in the task force, carefully explain what the HIA is about and what the purpose of the advisory group is. HIA practitioners have found that clarity is key when bringing people out of their silos—whether in government bureaucracy or in a specific field. Some people might not be accustomed to meeting with people besides their typical colleagues.

Keep in mind that these groups will be comprised of individuals with different preferences for communication (in-person meetings, phone calls, conference calls). Furthermore, it is not feasible to expect everyone to be able to show up to each scheduled meeting, which demonstrates the need for multiple meetings, perhaps at different times and places, and for creating a schedule in advance (and being willing to be flexible).

Managing more than one task force will multiply the logistical challenges of coordination. However, it is beneficial when stakeholders have very different backgrounds and opinions.

### **Prioritizing health impacts**

Aim for 2-5 health impacts to assess. Practitioners emphasize that studying two impacts is a great starting point (and certainly better than none), and five is a suggested maximum. Having too many topics or threads can be overwhelming and diffuse the momentum of the HIA.

There are no universal criteria for selecting impacts to study because of the combination of community context of the HIA plan, policy, or project.

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### **ADHERE TO HIA MINIMUM STANDARDS—AND UNDERSTAND THE FLEXIBILITY THAT PROVIDES HIA TEAMS.**

For more information, see [The Minimum Elements and Practice Standards for Health Impact Assessment](#).

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Be sure  
to include  
someone from  
the local health  
department!

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*Active youth indicate a healthy community.*

*(Source: © thinkstockphotos.com |*

*DigitalVision | Roger Weber*



### **Other tips**

Ask for help from outside field of practitioners—so for planners, that could mean reaching out to housing experts or public health professionals. Be sure to save time and resources (funding) for monitoring and evaluation. Sometimes, taking something off the table is the right answer.

## ALTERNATIVES TO HIA

In some cases, planning professionals will make the decision not to conduct an HIA during the screening step, or discover political opposition, or encounter other barriers (like limited funding or staff capacity). HIA is not the only way to incorporate health into planning processes or decisions. Practitioners have also used the basic principles of HIA to develop related tools such as checklists, guidelines, and simplified frameworks. These alternatives can be used to ensure that health benefits are optimized during the planning process in cases where an HIA is not possible or appropriate or where sufficient evidence and support exist to embed health directly into policies or projects. Additionally, planners can build upon and use the evidence base gathered through prior planning HIAs to inform their work.

The conceptual model (Figure 1) depicts opportunities to include health in the planning process, and planners can select alternative methods for introducing or strengthening the discussion about health impacts. In some cases, the screening process might uncover that an HIA is not the right approach for addressing the decision at hand, but that there is the community will to find ways to incorporate a “Health in All Policies” approach. These resources can help.

- [Health in All Policies Framework and Tools](#)
- [Health in All Policies: A Guide for State and Local Government](#)
- [Health in All Policies Resources](#)
- [Health and Planning Checklists](#)
- [CDC Healthy Community Design Checklists](#)
- [The Mariposa Healthy Living Toolkit](#)

## FOR MORE INFORMATION

For those who would more information, the annotated Planners’ Guide (provided in the Appendix) provides links to great resources that describe the rationale and framework for HIA, as well as checklists, tools, and other materials that are helpful for planners who would like to learn more about HIA and better understand how they might be able to conduct an HIA. These resources are also helpful for those who are familiar with HIA and experienced HIA practitioners who are looking for additional guidance, a fresh perspective, and advice on engaging with a new field or topical area.

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## APPENDIX: THE PLANNERS GUIDE OF HIA RESOURCES

### Four central organizations that specialize in Health Impact Assessment:

*See their websites for comprehensive background materials, resources, and tools.*

#### The Centers for Disease Control and Prevention's [Healthy Places Health Impact Assessment Resources](#)

The Healthy Community Design Initiative of the CDC provides a compendium of resources related to HIA, with links to guidance, fact sheets, general information and clearinghouses, education, methodology and tools, and HIA papers.

#### [Health Impact Project's Resources](#)

The Health Impact Project's website includes research and analysis, news, and information about HIA, as well as a resource library that includes guidance for good practice and other practical tools. Of note, the Health Impact Project collaborated with the National Center for Healthy Housing on guidance for the housing sector, and related issue briefs are available on the site.

#### [Human Impact Partners Tools and Resources](#)

Human Impact Partners has an extensive list of tools and resources in its Capacity Building portfolio. These tools and resources are great primers about the HIA process, collaboration, community participation, stakeholder engagement, and equity considerations.

Of note to planners: Health Impact Assessment Toolkit: A Handbook to Conducting HIAs; FAQs about Integrating HIA into EIA; Equity Metrics for HIA Practice; Promoting Equity through HIA; Tools and Materials for Stakeholder Engagement; Human Impact Partners Training Materials; HIA Readiness Question Guide; Research and Assessment Resources; and Sample HIA Policies

#### [Society for Practitioners of Health Impact Assessments \(SOPHIA\)](#)

SOPHIA is a global membership network of HIA practitioners. The website provides HIA resources, reports, journal articles, other publications, and links to HIA courses and workshops on its website.

### HIA/HIAP Checklists and Resources

1. [A Health Impact Assessment Framework for Assessing Vulnerability and Adaptation Planning for Climate Change](#)

This journal article describes a framework for using HIAs to assess the potential health impacts of climate change. This framework can be used to better understand the risks associated with potential health impacts of climate change and to provide decision makers with information that can facilitate the development of effective adaptation plans.

2. [Active Design Guidelines](#)  
The Active Design Guidelines provides architects and urban designers with a manual of strategies for creating healthier buildings, streets, and urban spaces, based on the latest academic research and best practices in the field. For planners, the guidelines include urban design strategies for creating neighborhoods, streets, and outdoor spaces that encourage walking, bicycling, and active transportation and recreation.
3. [Alaska's HIA Toolkit](#)  
The Alaska Health Impact Assessment Program evaluates the potential human health effects of new policies, programs, or development projects in Alaska through the use of existing public health surveillance data, medical literature reviews, and field studies.
4. [Alliance for Biking and Walking Benchmarking Resources](#)  
These benchmarking resources combine original research with over 20 government data sources to compile data on bicycling and walking levels and demographics, safety, funding, policies, infrastructure, education, public health indicators, and economic impacts. It's an essential go-to resource for public officials, advocates, decision makers, and researchers.
5. The [American Planning Association's Guidance for Health in Development Review](#)  
This document serves as model guidance for ensuring health is a consideration in the decision-making process for the review and approval of development plans—from a planned unit development to the subdivision and site levels.
6. The [American Planning Association's The State of Health Impact Assessment in Planning](#)  
This report provides an overview of HIAs in planning, a description of the HIA process, and snapshots from an in-depth study of 27 planning HIAs. It concludes with analysis from the research, and follows with five case studies that demonstrate the diversity of planning HIAs, highlight effective strategies for conducting HIA, and share lessons learned from the process.
7. The [American Planning Association's The Benefits of Street-scale Features for Walking and Biking report](#)  
This literature review focuses on the benefits that may arise from investment in different types of street-scale features, either independently or in combination. The review considers not only potential impacts related to physical activity—which have been treated extensively in the literature to date—but also a variety of co-benefits including social cohesion, crime prevention and public safety, multimodal traffic safety, mental health, and economic effects. The review links these co-benefits to various types of street-scale features that encourage walking and biking, such as sidewalks, bicycle lanes, traffic calming, crossing aids, aesthetics and placemaking, public space, street trees, green infrastructure, and street furniture.

8. [American Trails' Health Resources](#)  
A directory of trail-specific resources, organized by geography, benefits, programs, and more.
9. [Arkansas Bicycle and Pedestrian Plan's Guidance for Local Bicycle and Pedestrian Planning](#)  
A guidance document for local governments interested in preparing a bicycle and pedestrian plan; this document includes a description of typical components in a local plan and a list of tools to assist staff in completing each element.
10. [Arkansas Coalition for Obesity Prevention's Healthy Communities Toolkit](#)  
A collection of resources to assist Arkansas municipalities with creating healthy communities and economies.
11. [Association of State and Territorial Health Officials \(ASTHO\) Health in all Policies Resources](#)  
This compendium of Health in all Policies resources includes a framework that details the key elements of the practice, promising strategies for implementing the practice, and setting goals for Health in all Policies practices.
12. [Build Healthy Places' Measure Up Tools](#)  
Measure Up is a microsite of resources and tools to help measure and describe programs' impact on families and communities and on factors related to health. It provides examples, tools, and resources to help to make a case.
13. [Built Environment and Public Health Clearinghouse](#)  
The Built Environment and Public Health Clearinghouse (BEPHC) is a resource for training and relevant news about the intersection of health and place. APA, the American Public Health Association (APHA) and the National Network of Public Health Institutes (NNPHI) were a part of the 2014 relaunch as the clearinghouse, which now offers both academic and professional training resources that address the link between public health with planning, architecture, health impact assessment and transportation engineering, among others.
14. [Built Environment Assessment Tool](#) (BE Tool)  
BE Tool is a direct systematic observation data collection instrument for measuring the core features and quality of the built environment related to behaviors that affect health, especially behaviors such as walking, biking, and other types of physical activity. The core features assessed in the BE Tool include: built environment infrastructure (e.g., road type, curb cuts/ramps, intersections/crosswalks, traffic control, transportation), walkability (e.g., sidewalk/path features, walking safety, aesthetics, and amenities), bikeability (e.g., bicycle lane/path features), recreational sites and structures, and the food environment (e.g., access to grocery stores, convenience stores, farmers markets, etc.).



15. [Caltrans' Benefit/Cost \(B/C\) tool](#)  
A benefit-cost model for infrastructure and noninfrastructure active transportation proposals required in Caltrans-funded projects.
16. [Centers for Disease Control and Prevention's Building Resilience Against Climate Effects \(BRACE\) Framework](#)  
The Building Resilience Against Climate Effects (BRACE) framework is a five-step process that allows health officials to develop strategies and programs to help communities prepare for the health effects of climate change. Part of this effort involves incorporating complex atmospheric data and both short- and long-range climate projections into public health planning and response activities.
17. [Centers for Disease Control and Prevention's Healthy Places Transportation HIA Toolkit](#)  
The Transportation HIA Toolkit provides a framework for public health departments, city planners, project managers, and other stakeholders to conduct HIAs on proposed transportation projects, plans, and policies.
18. [Centers for Disease Control and Prevention's Parks and Trails HIA Toolkit](#)  
This toolkit provides a framework for public health departments, city planners, project managers, and other stakeholders to work together in the development of HIAs with parks and trails components.
19. [U.S. Department of Transportation and Centers for Disease Control and Prevention's Transportation and Health Tool](#)  
The tool provides data on a set of transportation and public health indicators for each U.S. state and metropolitan area that describe how the transportation environment affects safety, active transportation, air quality, and connectivity to destinations. The tool allows users to quickly see how a state or metropolitan area compares with others in addressing key transportation and health issues. It also provides information and resources to help agencies better understand the links between transportation and health and to identify strategies to improve public health through transportation planning and policy.
20. [Central Corridor Workshop: Using Health Data as a Design Tool](#)  
This report summarizes the proceedings from a workshop introducing the roles that population health data and health impact assessments can play in the real estate development process. This report walks through the six steps comprising a full-blown HIA and the value that health considerations bring to the design process in general.
21. [Climate Change Policy HIA Training for Health Professionals](#)  
This training is designed for health professionals with experience conducting or contributing to health impact assessments and provides a foundation in understanding different climate change policies and how they can affect health. It is intended to help professionals evaluate health effects of climate change policy.

22. [Design for Health HIA Resources](#)  
Design for Health, though no longer producing new content (as of 2015), maintains a website with HIA tools and resources, some of which were developed for planners focusing on health issues related to urban and comprehensive planning.
23. [Enterprise Green Communities Criteria](#)  
Enterprise Green Communities focuses on transforming the quality of affordable housing in the United States and aligns affordable housing investment strategies with environmentally responsive building practices. The criteria provides a framework for housing developers to guide the decision-making process—and connects to the Enterprise Green Communities Certification program.
24. [Environmental Protection Agency's Environmental Justice Tool \(EJ SCREEN\)](#)  
EJSCREEN is an environmental justice mapping and screening tool with a nationally consistent dataset and approach for combining environmental and demographic indicators. EJSCREEN allows visitors to choose a geographic area and then provides demographic and environmental information for that area.
25. [Environmental Protection Agency's EnviroAtlas](#)  
EnviroAtlas is a collection of interactive tools and resources that allow users to explore the many benefits people receive from nature, often referred to as ecosystem services. Using EnviroAtlas, users can access, view, and analyze diverse information to better understand how various decisions can affect an array of ecological and human health outcomes.
26. [Equity Metrics for Health Impact Assessments](#)  
A product of SOPHIA's Equity Working Group, these metrics on process and outcomes promotes equity through HIA.
27. [Guidance and Best Practices for Stakeholder Participation in Health Impact Assessments](#)  
Prepared by the Stakeholder Participation Working Group of the 2010 HIA of the Americas Workshop, this guide is for HIA practitioners, community groups, and stakeholders who want to more effectively participate in, lead, or influence an HIA. This guide distills stakeholder participation techniques, case studies, and guiding principles from various fields of expertise, including HIA, environmental and social impact assessment, land-use and transportation planning, community-based participatory research, and public health.

28. [Health Economic Assessment Tool](#) (HEAT)  
The World Health Organization's Health Economic Assessment Tool (HEAT) assists with conducting an economic assessment of the health benefits of walking or cycling by estimating the value of reduced mortality that results from specified amounts of walking or cycling. HEAT can be used in a variety of situations, such as: when planning a new piece of cycling or walking infrastructure, to value the reduced mortality from past and/or current levels of cycling or walking, to provide input into more comprehensive economic appraisal exercises, or prospective health impact assessments.
29. [Health Impact Assessment: Oregon's Practitioner Toolkit](#)  
Produced by the Oregon Health Authority, this is a handbook for conducting Rapid HIAs. Designed specifically for Oregon HIA practitioners, this document provides basic information about conducting HIAs, including a step-by-step process to follow and resources for additional information.
30. [Health in All Policies: A Guide for State and Local Governments](#)  
Health in All Policies: A Guide for State and Local Governments was created by the American Public Health Association, Public Health Institute, and the California Department of Public Health in response to growing interest in using collaborative approaches to improve population health. The guide draws heavily on the experiences of the California Health in All Policies Task Force and incorporates information from the published and gray literature and interviews with people across the country.
31. [Health in Context: A new role for green building design](#)  
While it can be difficult to trace a direct line between a single design feature and a single health outcome, a growing body of evidence points to the potential for design to play a more active role in supporting healthy outcomes and reducing exposure to conditions that can lead to negative health outcomes. This is particularly true for efforts to reduce the burden of chronic disease and enhance community resilience to climate change. Green building programs like LEED and sustainable land-use policies can be used as tools to advance this effort, because many green strategies sit at the intersection of health and efficiency.
32. [Healthy Community Definition](#)  
"A healthy community is one that strives to meet the basic needs of all residents; it is guided by health equity principles in the decision-making process; it empowers organizations and individuals through collaboration, civic and cultural engagement for the creation of safe and sustainable environments. Vibrant, livable and inclusive communities provide ample choices and opportunities to thrive economically, environmentally and culturally, but must begin with health."
33. [Landscape Performance Series](#)  
The Landscape Performance Series is the online set of resources to help designers, agencies, and advocates evaluate performance, show value, and make the case for sustainable landscape solutions.

34. [LEED for Neighborhood Development](#)

The LEED for Neighborhood Development (LEED-ND) rating system is a product of the U.S. Green Building Council, Congress for the New Urbanism, and the Natural Resources Defense Council. The LEED-ND criteria emphasize projects that support the overall health, natural environment, and quality of life in our communities.

35. [LEED Health Process Pilot Credit](#)

The new Integrative Process for Health Promotion is available as a pilot credit within the U.S. Green Building Council v4 BD+C rating system (as of May 2016). It guides project teams through a systematic consideration of a project's health impacts and rewards teams for prioritizing strategies according to existing health needs. There are step-by-step instructions, guidance for complying with the required documentation, and example worksheets available.

36. [Metropolitan Area Transportation Planning for Healthy Communities](#)

This report develops a comprehensive approach for how MPOs can approach health as a direct, broadly-based goal for interdisciplinary planning and how to consider health during all stages of the metropolitan area transportation planning process.

37. [Michigan Healthy Communities Collaborative Tools](#)

The Michigan Healthy Communities Collaborative, comprised of partner organizations throughout Michigan, has developed online assessments and websites to help promote and support better health.

38. [Mid-Michigan Health Impact Assessment Toolkit](#)

The HIA Toolkit helps support the HIA process by providing free access to environmental and health data to planners, decision makers, landowners, developers, and the public; mapping and visualization applications; and assessment of impacts that will showcase how to integrate an assessment of public health impacts within a greater, dynamic movement towards sustainability in mid-Michigan region.

39. [Mid-South Regional Greenprint HIA Toolkit](#)

A toolkit developed in coordination with the Mid-South Regional Greenprint HIA that provides general HIA resources and publications, along with resources based by each of the HIA steps, and further resources by 8 topics: Parks and Greenways, Equity, Transportation Choices, Health and Safety, Neighborhoods and Housing, Resources and Environment, Workforce and Economy, and Regional Planning.

40. [Minimum Elements and Practice Standards for Health Impact Assessments](#)

Published by the Society of Practitioners of Health Impact Assessments (SOPHIA), this document describes best practices and minimum requirements for conducting HIAs. Version 3 was released in late 2014.

41. [NACTO's Urban Street Design Guide](#)  
A blueprint for designing 21st century streets, the guide unveils the toolbox and the tactics cities use to make streets safer, more livable, and more economically vibrant. The guide outlines both a clear vision for complete streets and a basic roadmap for how to bring them to fruition.
42. [National Center for Safe Routes to Schools Resources](#)  
A centralized, web-based collection of Safe Routes to School-related materials and documents compiled by practitioners and program leaders from across the United States.
43. [National Environmental Public Health Tracking Network](#)  
The National Environmental Public Health Tracking Network is a system of integrated health, exposure, and hazard information and data from a variety of national, state, and city sources. The Tracking Network offers maps, tables, and charts with data about chemicals and other substances found in the environment; some chronic diseases and conditions; and specific areas.
44. National Park Service and Centers for Disease Control and Prevention's [Parks, Trails, and Health Workbook](#)  
This workbook is intended as an outline for incorporating public health considerations in the development of a park or trail. It can help facilitate cross-sector collaboration, find data and information, assess the health and community needs, and prepare for an HIA.
45. [Pedestrian and Bicycle Transportation Along Existing Roads—ActiveTrans Priority Tool Guidebook](#) (NCHRP Report 803)  
This guidebook presents the ActiveTrans Priority Tool (APT), a step-by-step methodology for prioritizing improvements to pedestrian and bicycle facilities, either separately or together as part of a complete streets evaluation approach. The methodology is flexible, allowing the user to assign goals and values that reflect those of the agency and the community. It is also transparent, breaking down the process into a series of discrete steps that can be easily documented and communicated to the public. The guidebook is supplemented by a CD that contains a programmed spreadsheet to facilitate implementation of the ActiveTrans methodology, as well as a final report that documents the research approach, findings, and conclusions.
46. [Promoting Equity Through the Practice of Health Impact Assessment](#)  
PolicyLink's report identifies how HIA practitioners and equity advocates can ensure a strong focus on promoting equity through HIAs as well as how HIA is a tool for supporting equitable decision-making processes and outcomes.
47. [Protocol for Assessing Community Excellence in Environmental Health](#)  
Developed by the National Association of County and City Health Officials, the Protocol for Assessing Community Excellence in Environmental Health is a methodology to guide local communities in identifying and addressing environmental health priorities.

48. [Safe Routes to Schools National Partnership—Resource Center](#)  
A Safe Routes to Schools clearinghouse providing wide-ranging resources, publications, news, webinars, up-to-date research, etc.
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50. [San Diego Border Health Equity Transportation Study](#)  
The San Diego Association of Governments completed the Border Health Equity Transportation Study, documenting the links between the built environment and health outcomes in the San Ysidro community near the U.S.-Mexico border. The study identified health disparities in San Ysidro and quantified the possible impacts of transportation and other improvement projects on community health to help both community members and city planners to prioritize projects and programs to reduce health disparities. The final study identified 16 key recommendations that show the most promise for improving community health.
51. [The San Francisco Indicator Project](#)  
Originally began in San Francisco, the Sustainable Communities Index (SCI) is a comprehensive set of measurement methods for indicators of livable, equitable and prosperous cities. The SCI includes over 100 measures that can be used to track diverse sustainability objectives for the environment, transportation systems, community cohesion and civic engagement, public facilities, education, housing, economic strength, and health systems. Where possible, the SCI methods try to represent indicators at the neighborhood scale.
52. [Seattle Healthy Living Assessment](#)  
Seattle's Neighborhood Planning team developed the Health Living Assessment to consider health prior to beginning a planning process. The plan features an overall health-based "framework for planning," 16 health indicators that identify linkages between health and the physical environment, and inclusive engagement tools.
53. [STAR Communities Rating System](#)  
The STAR Community Rating System's evaluation measures collectively define community-scale sustainability and present a vision of how communities can become more healthy, inclusive, and prosperous across seven goal areas. The system provides a frame for communities to catalyze their planning and partnership efforts, and the STAR community rating certification program allows communities to credibly track progress and increase transparency and accountability. .
54. [Statewide Transportation Planning for Healthy Communities](#)  
This report presents insights and a flexible framework for state departments of transportation that choose to integrate public health considerations into their transportation planning and decision making.



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56. [The Community Guide](#)  
The Guide to Community Preventive Services is a free resource to help planners, government officials, and public health professionals choose programs and policies to improve health and prevent disease in their communities.
57. [U.S. Climate Resilience Toolkit](#)  
The U.S. Climate Resilience Toolkit provides scientific tools, information, and expertise to help people manage their climate-related risks and opportunities and improve their resilience to extreme events. The site is designed to serve interested citizens, communities, businesses, resource managers, planners, and policy leaders at all levels of government.
58. [Urban Land Institute's Building Healthy Places Toolkit](#)  
The Urban Land Institute's Building Healthy Places Toolkit: Strategies for Enhancing Health in the Built Environment outlines evidence-supported opportunities to enhance health through changes in approaches to buildings and projects. Developers, owners, property managers, designers, investors, and others involved in real estate decision making can use the strategies described in this report to create places that contribute to healthier people and communities and that enhance and preserve value by meeting the growing desire for health-promoting places.
59. [U.S. Department of Transportation and Centers for Disease Control and Prevention's Transportation and Health Tool](#)  
The tool provides data on a set of transportation and public health indicators for each U.S. state and metropolitan area that describe how the transportation environment affects safety, active transportation, air quality, and connectivity to destinations. The tool allows users to quickly see how a state or metropolitan area compares with others in addressing key transportation and health issues. It also provides information and resources to help agencies better understand the links between transportation and health and to identify strategies to improve public health through transportation planning and policy.