

## Health Impact Assessment Preliminary Checklist: Background and Instructions



Version 2.0

DESIGN FOR HEALTH is a collaboration between the University of Minnesota and Blue Cross and Blue Shield of Minnesota that serves to bridge the gap between the emerging research base on community design and healthy living with the every-day realities of local government planning.

**Design for Health**  
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## Basic Idea

This Design for Health preliminary checklist is part of a suite of health-impact assessment (HIA) tools, including a rapid-assessment workshop process and a more data-intensive threshold workbook. The three HIA tools are unusual because they specifically focus on health issues related to urban and comprehensive planning. This preliminary checklist is meant to be used by those engaged in planning and target issues where there is some evidence that aspects of the built environment—over which planners have some control—actually influence human health. Note: Summary instructions are printed on the checklist itself.

The HIA preliminary checklist is meant to provide a relatively simple approach that can suggest answers to important questions about the potential for health impacts associated with plans, policies, or projects. In this desktop exercise, a reviewer responds to questions and sums the scores. The checklist highlights potential health concerns and the total score helps guide the decision about pursuing a more elaborate HIA.

Other HIA approaches tend to be either very broad (considering a range of social issues potentially associated with health and well-being) or narrowly focused (dealing only with those issues where significant public-health data is available). In contrast, this domain-specific or subject-specific HIA tool focuses on the work of urban planners. Urban planners already undertake a wide variety of environmental impact assessments, fiscal impact assessments, visioning processes, and sustainability and livability assessments. This tool is designed to be an easy way to supplement these activities and focus attention on human health.

## Ideas Behind the Questions

A number of theoretical models are used in public health to examine the determinants of health. Typically these involve biology, individual behavior, social and economic context, access to various services, and the environment. This HIA checklist focuses primarily on environmental and some social topics, specifically those within the domain of the city-planning profession.

Part 1 focuses on how significant the plan, policy or project is, in terms of scope or size. This is a common step in the HIA process. These specific questions were adapted from similar lists in several international sources. These are usefully cited in a report from the Commonwealth of Australia (2001).

Part 2 examines the characteristics of the plan, policy or project relative to a set of topics identified as having evidence for a link between human health and the built environment. These effects can be positive or negative and certainly do not represent an exhaustive list, as a project/plan can have other effects.

Companion research summaries, highlighting evidence linking human health and the built environment, are published in the Design for Health Key Questions series. The Design for Health Information Sheet series explains how to translate the research into plans and ordinances.

The complete list of issues addressed by Design for Health includes:

- Accessibility
- Air Quality
- Environment and Housing Quality
- Food
- Mental Health
- Physical Activity
- Safety
- Social Capital
- Water Quality

This set of topics is based on similar lists in other references. Frumkin et al.'s (2004) book, *Urban Sprawl and Public Health*, for example, contains chapters on air quality, mental health, physical activity, social capital, special populations, and traffic injuries. The *Design for Health* series adds food, accessibility, and environment and housing quality; and integrates special populations under each topic. Overall, these various lists hone in on major intersections between health and the built environment.

The Preliminary Checklist itself contains questions about a selection of these topics, focused on those with particularly clear evidence and with which fall within the scope of planners' work.

## Scoring

The Preliminary Checklist scoring system is designed to identify those plans, policies or projects that are likely to have significant health impacts by virtue of their size, character, location or other factors. The scoring helps planners make decisions about when it might be necessary to progress to a more detailed and time-consuming version of an HIA. Although the total points may not indicate the need for an HIA, answers to specific questions could indicate a need to conduct further assessment on a particular health topic. If the total points in Part 2 = 6, but your plan includes housing within 200 m (656 feet) of a major highway, for example, the air-quality effects should be further considered. In this checklist, each question receives an equal weighting. It would be possible, however, to vary the weighting of each question to respond to local concerns and values.

## Using the Checklist

The Preliminary Checklist is designed to be used in two contexts:

- An individual planner can use it to screen a project, policy or plan, and identify potential problem areas, and
- In a workshop, the checklist can be used to provoke discussion about health issues in a project, policy or plan.

## Required Information to complete the checklist:

Specific information is needed in order for an individual planner or for workshop participants to complete the preliminary checklist. However, much of this information is similar to what is collected for the plan, policy or proposal under review. Someone very familiar with the project will be able to answer most of the questions very quickly; for someone less familiar it could take some time (approximately 3-6 hours) to collect the necessary information. After collecting the necessary information the checklist will only take a short time to complete.

In the tables on the following pages, we outline the information required to complete the checklist, along with where and from whom one would get the information. In table 1, the information required for a project proposal is outlined; table two outlines the necessary information for a proposed plan or policy.

**Table 1: Information needed to conduct preliminary checklist on a project proposal:**

<b>Part 1: Is it of enough significance to assess?</b>			
<b>Key Questions</b>	<b>What information is needed?</b>	<b>Where do you get this information?</b>	<b>Who has the information?</b>
<b>Geographical extent:</b> Does it apply to a geographic area of a full city block or larger?	<ul style="list-style-type: none"> <li>Proposed project boundaries</li> <li>Street network</li> </ul>	<ul style="list-style-type: none"> <li>Site plan</li> <li>Master streets plan</li> </ul>	<ul style="list-style-type: none"> <li>Developer</li> <li>Planning</li> <li>Public works</li> </ul>
<b>Reversibility:</b> Will the changes be difficult or expensive to reverse once put in place?	<ul style="list-style-type: none"> <li>Project costs</li> <li>Infrastructure costs</li> </ul>	<ul style="list-style-type: none"> <li>Project proposal</li> </ul>	<ul style="list-style-type: none"> <li>Developer</li> <li>Public works</li> <li>Planning</li> <li>Finance department</li> </ul>
<b>Population size:</b> Does it substantially increase the residential population or workforce of any area of 100 acres or more (e.g. an increase greater than 33%)?	<ul style="list-style-type: none"> <li>Current population</li> <li>Proposed residential and employment figures</li> </ul>	<ul style="list-style-type: none"> <li>Census</li> <li>Project proposal</li> </ul>	<ul style="list-style-type: none"> <li>Developer</li> <li>Planning</li> <li>Met Council</li> </ul>
<b>Cumulative impact:</b> Is it occurring in a place where specific local health problems have been identified (e.g. traffic safety, air quality, lack of healthy foods, contaminated brownfield)?	<ul style="list-style-type: none"> <li>Proposed land uses</li> <li>Health data</li> <li>Site conditions</li> <li>Traffic conditions</li> </ul>	<ul style="list-style-type: none"> <li>Site Plan</li> <li>Comprehensive plan</li> <li>Environmental review</li> <li>Transportation plan</li> <li>CIP</li> </ul>	<ul style="list-style-type: none"> <li>Developer</li> <li>Planning</li> <li>Environmental services</li> <li>Health agency</li> <li>EPA</li> </ul>
<b>People affected:</b> Does the project or plan affect vulnerable groups (e.g. children, older people, and people with low incomes)?	<ul style="list-style-type: none"> <li>Existing and proposed land use</li> <li>Demographic information</li> </ul>	<ul style="list-style-type: none"> <li>Site plan</li> <li>Comprehensive plan</li> <li>Census</li> </ul>	<ul style="list-style-type: none"> <li>Developer</li> <li>Planning</li> <li>Housing/service providers</li> <li>School district</li> </ul>
<b>Land use:</b> Does it substantially change the predominant land (e.g. from residential to commercial)?	<ul style="list-style-type: none"> <li>Existing and proposed land use</li> </ul>	<ul style="list-style-type: none"> <li>Site plan</li> <li>Comprehensive plan</li> </ul>	<ul style="list-style-type: none"> <li>Developer</li> <li>Planning</li> </ul>
<b>Institutional capacity:</b> Is the capacity of local government, nonprofit, and private organizations to address any potential problems adequate?	<ul style="list-style-type: none"> <li>Local staff availability and expertise</li> <li>Local tax capacity</li> </ul>	<ul style="list-style-type: none"> <li>n/a</li> </ul>	<ul style="list-style-type: none"> <li>Planning</li> <li>Public works</li> <li>Finance department</li> </ul>



<b>Part 2: Does the plan or proposal meet some initial thresholds for a healthy community? Answer the following in relation to the plan or project and adjacent uses.</b>			
<b>Key Questions</b>	<b>What information is needed?</b>	<b>Where do you get this information?</b>	<b>Who has the information?</b>
<b>Accessibility:</b> Does the plan involve residential components that are built at an average density greater than seven units per acre of buildable land available for residential use?	<ul style="list-style-type: none"> <li>Proposed and existing land use</li> </ul>	<ul style="list-style-type: none"> <li>Site plan</li> </ul>	<ul style="list-style-type: none"> <li>Developer</li> <li>Planning</li> </ul>
<b>Accessibility:</b> Is there regularly scheduled transit service within three-quarter miles of all residential and employment areas?	<ul style="list-style-type: none"> <li>Proposed land use</li> <li>Transit routes</li> </ul>	<ul style="list-style-type: none"> <li>Site plan</li> <li>Transportation plan</li> <li>Transit system map</li> </ul>	<ul style="list-style-type: none"> <li>Developer</li> <li>Planning</li> <li>Public works</li> <li>Transit providers</li> </ul>
<b>Physical activity/social capital:</b> In order to provide options for physical activity and social interaction, particularly for children, are all residential areas located within 400 meters of either a neighborhood park, trail, or open space?	<ul style="list-style-type: none"> <li>Existing and proposed land use</li> <li>Park and trail system map</li> </ul>	<ul style="list-style-type: none"> <li>Site plan</li> <li>Comprehensive plan</li> <li>Parks, trails &amp; open space plan</li> </ul>	<ul style="list-style-type: none"> <li>Developer</li> <li>Planning</li> <li>Parks and recreation</li> </ul>
<b>Social capital:</b> Does the plan or project include a mix of housing densities and/or tenures (e.g. at least 15-20% of the housing stock in a different use tenure or as apartments /condos)?	<ul style="list-style-type: none"> <li>Proposed # of housing units and type</li> <li>Proposed density</li> </ul>	<ul style="list-style-type: none"> <li>Site plan</li> </ul>	<ul style="list-style-type: none"> <li>Developer</li> <li>Planning</li> </ul>
<b>Air quality:</b> Are there any residential areas or schools within 200 meters of a major auto-related transportation corridor such as a freeway or road with six or more lanes?	<ul style="list-style-type: none"> <li>Proposed land use</li> <li>Roadway locations and functional classification systems</li> </ul>	<ul style="list-style-type: none"> <li>Site plan</li> <li>Comprehensive plan</li> <li>Transportation plan (local, county, state)</li> <li>CIP (local, county, school district)</li> </ul>	<ul style="list-style-type: none"> <li>Developer</li> <li>Planning</li> <li>Public works</li> <li>County</li> <li>Mn/DOT</li> <li>School district</li> </ul>

<p><b>Air quality:</b> Does the plan or project area include businesses that disproportionately contribute pollutants (e.g., dry cleaners, automotive paint, manufacturing)?</p>	<ul style="list-style-type: none"> <li>• Existing and proposed land use</li> <li>• Business permit information</li> <li>• Air pollution permit information</li> </ul>	<ul style="list-style-type: none"> <li>• Site plan</li> <li>• Business licenses files</li> <li>• Air pollution permit files</li> </ul>	<ul style="list-style-type: none"> <li>• Developer</li> <li>• Planning</li> <li>• Business licensing</li> <li>• MN Pollution Control Agency</li> <li>• EPA</li> </ul>
<p><b>Water quality:</b> Is it developed on a site with existing water and sewer infrastructure?</p>	<ul style="list-style-type: none"> <li>• Existing and proposed water and sewer infrastructure</li> </ul>	<ul style="list-style-type: none"> <li>• Water system plan</li> <li>• Sewer system plan</li> </ul>	<ul style="list-style-type: none"> <li>• Public works</li> <li>• Met Council</li> </ul>
<p><b>Food:</b> Are there supermarkets or fruit and vegetable stores located within a mile of each home?</p>	<ul style="list-style-type: none"> <li>• Existing and proposed land use</li> <li>• Business permit information</li> </ul>	<ul style="list-style-type: none"> <li>• Site plan</li> <li>• Comprehensive plan</li> <li>• Business licenses files</li> </ul>	<ul style="list-style-type: none"> <li>• Developer</li> <li>• Planning</li> <li>• Housing services</li> <li>• Business licensing agency</li> </ul>
<p><b>Safety:</b> Does the plan or project adequately account for safe circulation patterns for all modes such as employing traffic calming measures, using separate facilities for non-motorized modes, or ensuring adequate lighting and sight lines.</p>	<ul style="list-style-type: none"> <li>• Existing and proposed land uses</li> <li>• Site conditions</li> <li>• Traffic conditions</li> <li>• Street network</li> </ul>	<ul style="list-style-type: none"> <li>• Site plan</li> <li>• Comprehensive plan</li> <li>• Transportation plan</li> <li>• Trails and open space plan</li> <li>• Bicycle and pedestrian plan</li> </ul>	<ul style="list-style-type: none"> <li>• Developer</li> <li>• Planning</li> <li>• Public works Mn/DOT</li> <li>• Transit provider</li> <li>• County</li> </ul>

**Table 2: Information needed to conduct preliminary checklist on a plan or policy:**

<b>Part 1: Is it of enough significance to assess?</b>			
<b>Key Questions</b>	<b>What information is needed?</b>	<b>Where do you get this information?</b>	<b>Who has the information?</b>
<b>Geographical extent:</b> Does it apply to a geographic area of a full city block or larger?	<ul style="list-style-type: none"> <li>Proposed project boundaries</li> <li>Street network</li> </ul>	<ul style="list-style-type: none"> <li>Draft plan/policy</li> <li>Master streets plan</li> </ul>	<ul style="list-style-type: none"> <li>Planning</li> <li>Public Works</li> </ul>
<b>Reversibility:</b> Will the changes be difficult or expensive to reverse once put in place?	<ul style="list-style-type: none"> <li>Plan costs</li> <li>Infrastructure costs</li> </ul>	<ul style="list-style-type: none"> <li>Draft plan/policy</li> </ul>	<ul style="list-style-type: none"> <li>Planning</li> <li>Public works</li> <li>Finance department</li> </ul>
<b>Population size:</b> Does it substantially increase the residential population or workforce of any area of 100 acres or more (e.g. an increase greater than 33%)?	<ul style="list-style-type: none"> <li>Current population</li> <li>Proposed residential and employment figures</li> </ul>	<ul style="list-style-type: none"> <li>Draft plan/policy</li> <li>Census</li> </ul>	<ul style="list-style-type: none"> <li>Planning</li> <li>Met Council</li> </ul>
<b>Cumulative impact:</b> Is it occurring in a place where specific local health problems have been identified (e.g. traffic safety, air quality, lack of healthy foods, contaminated brownfield)?	<ul style="list-style-type: none"> <li>Proposed land uses</li> <li>Health data</li> <li>Site conditions</li> <li>Traffic conditions</li> </ul>	<ul style="list-style-type: none"> <li>Draft plan/policy</li> <li>Comprehensive plan</li> <li>Environmental review</li> <li>Transportation plan</li> <li>CIP</li> </ul>	<ul style="list-style-type: none"> <li>Planning</li> <li>Environmental services</li> <li>Health agency</li> <li>EPA</li> </ul>
<b>People affected:</b> Does the project or plan affect vulnerable groups (e.g. children, older people, and people with low incomes)?	<ul style="list-style-type: none"> <li>Existing and proposed land use</li> <li>Demographic information</li> </ul>	<ul style="list-style-type: none"> <li>Draft plan/policy</li> <li>Comprehensive plan</li> <li>Census</li> </ul>	<ul style="list-style-type: none"> <li>Planning</li> <li>Housing/service providers</li> <li>School district</li> </ul>
<b>Land use:</b> Does it substantially change the predominant land (e.g. from residential to commercial)?	<ul style="list-style-type: none"> <li>Existing and proposed land use</li> </ul>	<ul style="list-style-type: none"> <li>Draft plan/policy</li> <li>Comprehensive plan</li> </ul>	<ul style="list-style-type: none"> <li>Planning</li> </ul>
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Part 2: Does the plan or proposal meet some initial thresholds for a healthy community? Answer the following in relation to the plan or project and adjacent uses.			
Key Questions	What information is needed?	Where do you get this information?	Who has the information?
<b>Accessibility:</b> Does the plan involve residential components that are built at an average density greater than seven units per acre of buildable land available for residential use?	<ul style="list-style-type: none"> <li>Proposed and existing land use</li> <li>Transit routes</li> </ul>	<ul style="list-style-type: none"> <li>Draft plan/policy</li> <li>Transportation plan (local &amp; regional)</li> </ul>	<ul style="list-style-type: none"> <li>Planning</li> <li>Public works</li> <li>Transit provider</li> <li>County</li> </ul>
<b>Accessibility:</b> Is there regularly scheduled transit service within three-quarter miles of all residential and employment areas?	<ul style="list-style-type: none"> <li>Proposed land use</li> <li>Transit routes</li> </ul>	<ul style="list-style-type: none"> <li>Draft plan/policy</li> <li>Transit system map</li> </ul>	<ul style="list-style-type: none"> <li>Developer</li> <li>Planning</li> <li>Public works</li> <li>Transit providers</li> </ul>
<b>Physical activity/social capital:</b> In order to provide options for physical activity and social interaction, particularly for children, are all residential areas located within 400 meters of either a neighborhood park, trail, or open space?	<ul style="list-style-type: none"> <li>Existing and proposed land use</li> <li>Park and trail system map</li> </ul>	<ul style="list-style-type: none"> <li>Draft plan/policy</li> <li>Comprehensive plan</li> <li>Parks, trails &amp; open space plan (if separate)</li> </ul>	<ul style="list-style-type: none"> <li>Planning</li> <li>Parks and recreation</li> <li>Public works</li> </ul>
<b>Social capital:</b> Does the plan or project include a mix of housing densities and/or tenures (e.g. at least 15-20% of the housing stock in a different use tenure or as apartments/condos)?	<ul style="list-style-type: none"> <li>Proposed # of housing units and type of housing</li> <li>Proposed density</li> <li>Existing land use</li> </ul>	<ul style="list-style-type: none"> <li>Draft plan/policy</li> <li>Comprehensive plan</li> </ul>	<ul style="list-style-type: none"> <li>Planning</li> </ul>
<b>Air quality:</b> Are there any residential areas or schools within 200 meters of a major auto-related transportation corridor such as a freeway or road with six or more lanes?	<ul style="list-style-type: none"> <li>Proposed land use</li> <li>Roadway locations and functional class systems</li> </ul>	<ul style="list-style-type: none"> <li>Draft plan/policy</li> <li>Comprehensive plan</li> <li>Transportation plan (local, county, state)</li> <li>CIP</li> <li>School district plan</li> </ul>	<ul style="list-style-type: none"> <li>Planning</li> <li>Public works</li> <li>County highway agency</li> <li>Mn/DOT</li> <li>School district</li> <li>Transit provider</li> <li>County</li> </ul>

<p><b>Air quality:</b> Does the plan or project area include businesses that disproportionately contribute pollutants (e.g., dry cleaners, automotive paint, manufacturing)?</p>	<ul style="list-style-type: none"> <li>• Existing and proposed land use</li> <li>• Business permit information</li> <li>• Air pollution permit information</li> </ul>	<ul style="list-style-type: none"> <li>• Draft plan/policy</li> <li>• Business licenses files</li> <li>• Air pollution permit files</li> </ul>	<ul style="list-style-type: none"> <li>• Planning</li> <li>• Business licensing</li> <li>• MN Pollution Control Agency</li> <li>• EPA</li> </ul>
<p><b>Water quality:</b> Is it developed on a site with existing water and sewer infrastructure?</p>	<ul style="list-style-type: none"> <li>• Existing and proposed water and sewer infrastructure</li> </ul>	<ul style="list-style-type: none"> <li>• Water system plan</li> <li>• Sewer system plan</li> </ul>	<ul style="list-style-type: none"> <li>• Public works</li> <li>• Met Council</li> </ul>
<p><b>Food:</b> Are there supermarkets or fruit and vegetable stores located within a mile of each home?</p>	<ul style="list-style-type: none"> <li>• Existing and proposed land use</li> <li>• Business permit information</li> </ul>	<ul style="list-style-type: none"> <li>• Draft plan/policy</li> <li>• Comprehensive plan</li> <li>• Business licenses files</li> </ul>	<ul style="list-style-type: none"> <li>• Planning</li> <li>• Housing services</li> <li>• Business licensing agency</li> <li>• Transit provider</li> <li>• County</li> </ul>
<p><b>Safety:</b> Does the plan or project adequately account for safe circulation patterns for all modes such as employing traffic calming measures, using separate facilities for non-motorized modes, or ensuring adequate lighting and sight lines.</p>	<ul style="list-style-type: none"> <li>• Existing and proposed land uses</li> <li>• Site conditions</li> <li>• Traffic conditions</li> <li>• Street network</li> </ul>	<ul style="list-style-type: none"> <li>• Draft plan/policy</li> <li>• Comprehensive plan</li> <li>• Transportation plan</li> <li>• Trails and open space plan</li> <li>• Bicycle and pedestrian plan</li> </ul>	<ul style="list-style-type: none"> <li>• Planning</li> <li>• Mn/DOT</li> <li>• Public Works</li> <li>• Transit provider</li> <li>• County</li> </ul>

## Outcomes of the preliminary checklist:

There are several outcomes that may emerge after the preliminary checklist has been completed.

- The process of completing the preliminary checklist, whether by an individual or in a workshop setting, increases knowledge about the connections between health and planning. For example, participants learn about how close residential areas should be to parks to promote physical activity and build social capital.
- The point-based scoring system helps to determine whether a more in depth HIA is needed.
- The range of health issues addressed in the preliminary checklist can help identify key health concerns that require more detailed analysis separately or in a more in depth HIA.
- While the preliminary checklist can provide a guideline for decisions about pursuing a more in depth HIA, in the process of completing it, participants may identify the need for scoring adjustments to reflect local values and conditions.

Conducting the checklist at a public meeting will allow planners to identify the main health concerns of the community and also informs residents about how development may impact health (both positive and negative impacts). This can also contribute to the decision about whether to conduct a more in depth HIA on all areas of the project or plan or whether to focus on specific areas that are of most concern in the community.

## References

Commonwealth of Australia. 2001. Health impact assessment guidelines. Canberra: Commonwealth Department of Health and Aged Care.

Frumkin, H., L. Frank and R. Jackson. 2004. Urban sprawl and public health: Design, planning, and building for healthy communities. Washington, DC: Island Press.