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# Where Health, Planning, and Community Empowerment Meet:

## A Rapid Health Impact Assessment Model and its Application in Los Angeles

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Abstract: There has been a surge of interest in Health Impact Assessment (HIA) in the United States, contributing to a range of practices that vary in their effort, duration, and complexity. HIA is a systematic but flexible process used to increase discussion of impacts to human health in decisions, such as in planning, which traditionally would not consider mental, social, or physical health and well-being but can affect them. Stakeholder participation is a core element of HIA practice, yet research suggests a gap between the intention of including meaningful participation and its implementation. This is particularly true in what are known as rapid HIAs due to their especially short timelines and the resource-intensiveness of meaningful community participation. We sought to address that gap, drawing on standard HIA practice and a Consensus Conference approach from Denmark to develop a rapid Health Impact Assessment model that includes meaningful participation and fosters empowerment among impacted residents using limited resources and within a short decision-making timeline. This paper describes a 2012 piloting of the rapid HIA model on a proposed stadium development project and findings about the HIA's impact, based on interviews with project stakeholders and a review of project outcomes. Findings indicated that the new model was successful: it contributed to a broader strategy that won a variety of health benefits and measures for the community; residents were engaged and felt empowered by the process; the rapid HIA helped organizations meet their goals; and the project contributed to changes in the stadium proposal that benefit health. The findings suggest that the model helps address a potential conflict practitioners and planners face between conducting a project with a short timeline and more fully engaging community stakeholders in the process.

#### Introduction

During the last decade, there has been a surge of interest in Health Impact Assessment (HIA) in the United States (Wernham 2012). Since 1999, approximately 300 HIAs have been completed or are currently in progress in forty states, authored by practitioners that range from city and regional agencies to nonprofit and community-based organizations to academics (Health Impact Project 2014). HIA is a systematic process used to increase discussion of impacts to human health in decisions made during the planning stages of a project or policy. Decision-makers traditionally have not considered mental, social, or physical health and well-being in assessing impacts, but all of these factors may affect the people living within the project or policy boundaries.

In the United States, HIA is practiced at local, state, regional, and federal levels and is largely voluntary; however, increasingly, states like Massachusetts mandate it for making decisions in transportation planning or in places where there are no specific legal or regulatory requirements. In California, HIA can be used to fulfill requirements in environmental laws for planning and development to analyze health impacts.

Historically, and as documented in several published reviews (Bhatia and Wernham 2008; National Research Council 2003; Steinemann 2000; Davies and Sadler 1997), there has been limited and inadequate attention to health in environmental analyses even though it is required by federal regulations like the National Environmental Policy Act of 1969 and similar state laws, like the California Environmental Quality Act (CEQA). HIA can be used within or in conjunction with the environmental review process to address affects on human health.

HIA can be tailored to a particular decision-making context, a flexibility that has led to a range of practices. The HIA process typically includes six steps—screening, scoping, assessment, recommendations, reporting, and monitoring/evaluation—but how and with whom each of those steps is carried out can vary. The types of HIA are categorized as rapid, intermediate, and comprehensive, based on how they vary in effort, duration, and complexity (National Research Council 2011). Regardless of type, HIA often involves a variety of data sources and methods, including input from affected stakeholders. Guidance documents are clear that in all HIAs, stakeholder participation should "be maximized to the greatest extent possible in order to achieve more effective and equitable HIA results" (Stakeholder Participation Working Group 2011, 3), and many HIA practitioners see stakeholder participation as critical to the success of HIA. Here, stakeholders are "individuals or organizations who stand to gain or lose from a decision or process" (ibid.), often thought of as communities of interest such as community-based organizations, residents, service providers, elected officials, businesses, public agencies, and others (Stakeholder Participation Working Group 2011).

Stakeholder participation speaks to one of the core values of HIA, articulated as democracy, which in this context has been described as "emphasizing the right of people to participate in the formulation and decisions of proposals that affect their life" (Quigley et al. 2006, 3). HIA provides a set of tools communities can use to participate in the research process and potentially gain publicity for issues that normally would be ignored. Participation also can improve the results of a project through modifications that address stakeholder concern and input. In addition, public health research shows better health outcomes among citizens

who are more civically engaged and feel a sense of control over the decisions that impact their lives (Cave, Molyneux, and Coutts 2004).

There is no single approach prescribed for stakeholder participation in HIA because what is appropriate varies with the context of a project and the interests, capacities, and cultures of potential stakeholders. Opportunities for stakeholder engagement in HIA are available throughout the six-step process and can be as in-depth or discrete as stakeholders have opportunity, interest, and capacity for, balanced with what is appropriate to reach decision-makers (Stakeholder Participation Working Group 2011). Examples range from general oversight of the HIA to input on how widely to cast the net of HIA topics on which to focus to collecting data, determining or giving feedback on findings and recommendations, and sharing results of the process.

Although stakeholder participation is a core strategy for advancing equity through HIA practice, reports in the past decade have documented a gap between the intention of HIA to include meaningful participation and its implementation (Parry and Wright 2003; Ross, Ornstein, and Botchwey 2014; Harris-Roxas, Simpson, and Harris 2004). Developing and maintaining participation can be time- and resource-intensive, potentially lengthening the timeline for each step of the HIA process (Harris-Roxas et al. 2011; Furber et al. 2007; Chilaka 2010). While detailed evaluations of the practice in the United States are forthcoming, reflections on practice in the United Kingdom, New Zealand, and Australia, where HIA practice precedes that in the United States by a decade or more, are informative and align with preliminary evaluation findings in the United States. In a 2005 report on HIA practice in the United Kingdom, Wright, Parry, and Mathers (2005) describe a tension between what they call the participatory and knowledge-gathering dimensions of policy HIAs, with the participatory aspect taking a back seat when it conflicts with what the project leads see as the ability to affect a policy decision, or when it is deemed too much of a challenge because of a short decision timeline (Wright et al. 2005). The same report describes "failures" in earlier attempts to match the ideal of community engagement in HIA with the practice of it, including experiences in the Netherlands and Sweden. The authors note that even in supportive climates, the participatory and empowerment aspects of HIA are challenging to operationalize, largely due to time and resource demands. The current paper seeks to demonstrate how to achieve fuller participation in a project with an especially short timeline, known as a rapid HIA.

Rapid HIA is promoted when resources are constrained and decisions have short timelines (Harris-Roxas et al. 2011; Furber et al. 2007; Chilaka 2010). The National Research Council (NRC) states that "rapid HIAs may be completed in a short time (weeks to months), are often focused on smaller and less complex proposals, and generally involve primarily literature review and descriptive or qualitative analysis" (National Research Council 2011, 44). Typically, a rapid process is used to inform a decision that takes place in an especially short time frame and that can shape the future of a community, region, or state; for example, a rapid HIA in Oregon sought to inform a decision the legislature would make in three months about policies to address average annual distances residents travel by vehicle (Perdue et al. 2012). Data on prevalence of rapid HIAs are not available for the United States; however, in a recent survey of the United Kingdom, 42% of HIAs undertaken by respondents were rapid (Chilaka 2010). Information from New Zealand and Australia similarly highlights the prevalence of rapid HIAs; a 2013 study of HIAs between 2005 and 2009 found that of those

included in the study, half from New Zealand and one-third of those from Australia were considered rapid (Haigh et al. 2013).

In contrast with the core values of HIA and the intention of the field—much like attempts for community engagement in other planning processes—practitioners find that a rapid HIA may in actuality include little to no public engagement. The NRC gives examples that in the past, practitioners prioritizing engagement under tight timelines have held a half-day workshop for stakeholders near the beginning of the HIA. By comparison, comprehensive HIAs span six months to one year. Although the steps are the same in both types of HIA, engagement typically is much fuller in a comprehensive HIA, as time permits stakeholders to be involved during every step.

We therefore set out with the purpose of developing a model for rapid HIA that would meaningfully engage and foster empowerment among impacted residents through a participatory approach in contexts with limited resources and under short decision-making timelines, and yet remain faithful to the practice by providing decision-makers with credible findings and recommendations to improve the impacts of a proposed decision on health. Empowerment here refers to a process that is multi-dimensional, social, involves a change in power, helps people gain control over their lives, and challenges assumptions about the ways things are and can be (Page and Czuba 1999; Israel et al. 1994; Rappaport & Seidman 2000). Although empowerment is often a goal of HIA, achieving the community participation necessary to meet this goal is a persistent struggle, as it is in many aspects of planning work (Parry and Wright 2003).

This paper: 1) describes the rapid HIA model developed and its goals, 2) describes a pilot project for the model on a proposed stadium development in downtown Los Angeles (LA), 3) reviews process-related outcomes and changes to the proposed project, and 4) presents the strengths and limitations of this rapid HIA model. Findings from the HIA are available online in the final project report (Human Impact Partners 2012).

#### Methods

#### About the Model

Human Impact Partners, a nonprofit organization in Oakland, California, developed a rapid HIA model (Table 1) that includes three in-person meetings with residents likely to be impacted by the decision ("impacted residents panel"), technical experts who bring relevant domain-specific information to the process ("subject matter experts"), members of organization(s) leading the HIA ("HIA team"), and other stakeholders (e.g., decision-makers and/or project proponents can participate in the process, if appropriate). The model was piloted in 2012 on a Los Angeles development proposal.

The model meets most HIA practice standards (Table 2) and adapts a Consensus Conference approach (North American HIA Practice Standards Working Group 2010). Consensus Conferences originated in Denmark to guide elected officials in science and technology decisions, and to stimulate public discussion of the issues (Fischer 2000; Dept. of Health and Human Services 2012; Anderson and Jaeger 1999; Bhatia 2011). In the United States, the

Consensus Conference model has been used infrequently. The National Institutes of Health (NIH) used it to consolidate, solidify, and broadly disseminate recommendations for medical provider practice (National Institutes of Health 2012). Boston University researchers convened a Consensus Conference to consider issues related to the practice of measuring chemicals in peoples' bodies, known as Human Biomonitoring (Nelson et al. 2009).

#### Applying the Model: A Pilot Project from Los Angeles

Between April and June 2012, staff from Human Impact Partners and three organizations based in Los Angeles—Los Angeles Community Action Network, Physicians for Social Responsibility—Los Angeles, and the Legal Aid Foundation of Los Angeles—(collectively "the HIA team") piloted the rapid model on a proposed stadium development known as Farmers Field. The purpose of the HIA was to work with residents who would likely be affected by a proposed football stadium to assess topics of concern, including potential impacts of the stadium that would contribute to health outcomes and were not already described in a Draft Environmental Impact Report (DEIR). The HIA team met in April to complete the screening activity described in Table 1, and decided to move forward with the HIA project.

#### About the Interviews Gathered Post-HIA

In August and September 2012, after the HIA was complete, Human Impact Partners interviewed eight of twenty-one people involved (two HIA team partners including one author of this paper, four impacted residents, and two subject matter experts), using a convenience sampling strategy. The sampling strategy has limitations but fits our informal intent in the interviews. The aim was to improve future practice by quickly gathering feedback and doing so shortly after completing the project. It was not intended as a formal evaluation. Interviews lasted up to 60 minutes, were confidential, were completed either in person or via telephone, and were one on one between staff and the interviewee except when using an interpreter between English and Spanish as needed. Participants were not compensated for their time. Interviewers asked about perceptions of resident participation and empowerment in the rapid HIA, value added to the decision-making process and outcomes, strengths of the model, and opportunities for improvement. Questions already developed by other researchers were used to assess perceptions of influence or control and, in turn, empowerment (Israel et al. 1994).

#### Understanding Effects of the HIA

To assess process-related effects of the HIA, Human Impact Partners staff informally identified common themes described by interview respondents. For outcome-related effects, authors reviewed commitments announced by the project developer in November 2012. Long-term effects were not yet known due to the brief amount of time that had elapsed since completion of the HIA. In the interim, the stadium project has been put on hold after management changes within the company leading the stadium development, and the professional league has yet to commit a team to it—a condition for moving forward with the stadium development.

#### Results

**Project Description.** The proposed development included a 72,000-seat expandable professional football stadium, demolition and reconstruction of part of the existing Convention Center, and a parking garage in downtown Los Angeles. Various stakeholders in the area argued that decision-makers were not considering potentially significant health impacts of the development on vulnerable populations living near the proposed site.

**Resident Panel Recruitment.** As described in Table 1, the model included a panel of residents who would be closely affected by the proposal. Los Angeles Community Action Network recruited twelve residents living near the proposed development for the impacted residents panel. Recruitment criteria included the following: equal numbers of representatives from surrounding communities; race and gender composition reflecting the impacted communities; and resident affiliation with a community-based organization in the impacted area that represented a significant stakeholder group (i.e., tenants, bus-riders, day laborers). All meetings used simultaneous translation between English and Spanish. Panel members received a small stipend as compensation for their time.

**Determining the HIA Research Focus.** During the first meeting, called the scoping meeting, the resident panel worked from draft documents assembled by the HIA team, and chose to focus on possible impacts the proposed development could have on four social determinants of health: housing (including displacement and gentrification), employment, public safety, and access to open space. These issues were important to local residents and deemed inadequately addressed in existing analyses (e.g., the DEIR) for the proposed development project. Figure 1, based on one of multiple diagrams drafted by the HIA team and refined by residents, illustrates potential linkages from the proposed development to health outcomes via gentrification and housing.

**Subject Matter Expert Panel**. After residents determined a research focus, the HIA team recruited three subject matter experts from Legal Aid Foundation of Los Angeles; the University of California, Los Angeles; and the University of Southern California to speak one month later, during the second set of meetings. At that time, the subject matter experts presented to the resident panel relevant research and data about topics including housing policy, gentrification and displacement, and policing and criminalization; discussed policy solutions to address issues; and had a discussion with members of the panel to address their questions and concerns. Some of the same subject matter experts also were present during the resident panel's conversation about recommendations, as a resource for answering questions and helping to craft feasible recommendations.

**Data Collection for Assessment.** Also during the four weeks between the two sets of meetings, the HIA team collected local existing conditions data related to the four health determinants. Data came from a convenience survey codeveloped by the HIA team and impacted residents panel, then administered to over seventy community members by the panel; existing reports by the Los Angeles Housing Department, the California Redevelopment Agency, and the DEIR; and health and demographics statistics from the Los Angeles County Department of Health and U.S. Census. Data from these sources were used, for example, to analyze indicators of gentrification (Kennedy and Leonard 2001; Chapple 2009) based on the current housing conditions, as well as demographic trends in the area near the stadium.

Consensus on Health Impacts and Recommendations. On the first day of the subsequent two-day meeting, called the assessment meeting, the impacted residents panel reported on the local survey experience and learned about the existing conditions data using a question-and-answer game based on a popular television quiz show. The format accommodated a range of education levels and familiarity with data. Subject matter experts then shared relevant research with the impacted residents panel.

The panel subsequently deliberated and reached consensus about likely impacts the proposed development could have on the four chosen social determinants of health and related health outcomes. For example, Table 3 is an excerpt from the HIA report with qualitative predictions about impacts on displacement and housing affordability/poverty.

The panel then met on a second day—called the recommendations meeting—to reach consensus on recommendations to mitigate potential negative health impacts of the project. The nineteen final recommendations included actions that either the stadium developer or the Los Angeles City Council could implement.

**Final Report.** A 70-page report developed by the HIA team and reviewed by subject matter experts was submitted as a comment on the DEIR and distributed to the City Council to inform decisions about the stadium development proposal.19 Residents and project partners also cited findings from the report in testimony to City Council and media materials.

### Process-Related Impacts: "As Part of This Process I Feel Empowered"

Residents and staff from HIA partner organizations reported that the process was successful in engaging and empowering residents. Participants used a 5-point Likert scale (strongly agree, agree, neutral, disagree, strongly disagree) to rate agreement with the following statement that assesses community control, one aspect of empowerment: "The HIA helped my community have influence over decisions that affect it." All residents interviewed chose either "agree" or "strongly agree," with comments that included, "As part of this process I feel empowered," and "So, we voiced our opinion with the HIA. We're still voicing our opinion...'Cause our voice is very important." To assess individual control, a second aspect of empowerment, residents were asked to rate their level of agreement with the following statement: "The HIA helped me have control over the decisions that affect my life." Responses included one each of "agree," "neutral," "disagree," and a non-response on the same 5-point scale.

All residents chose "agree" on the same 5-point scale when asked if the HIA process was successful. In particular, residents said they appreciated the opportunity to actively address community concerns, instead of "sitting around and complaining about problems." Interviewers asked two subject matter experts if the rapid HIA added value to the overall process; they chose "strongly agree." Responses included that the rapid HIA brought "structure and thoroughness with which resident voices and concerns were brought forward in a concise and useful way," with one expert adding that resident voices would not have been included otherwise.

One interviewee from a partner organization said, "Clearly [resident] power has grown, in comparison to where we were when we started," and "[The rapid HIA] brought together residents from all the neighborhoods who probably would not otherwise have worked on this project." A staff member from another partner organization offered, "In many ways for the impacted residents, they were given a better understanding of this particular land use process related to the project...and they did get to feel a sense of empowerment related to engaging around this particular issue."

Findings also included that the process helped meet organizational missions and goals. A staff member at one partner organization stated the process was helpful in achieving several goals, including educating residents, involving experts, increasing the level of substantive comments on the decision, and getting invited to the decision-making table. An interviewee from a different partner organization said that the process helped achieve parts of their organizational mission about helping communities better understand the process and their rights, though was less helpful in achieving their goal of using legal grounds to challenge the stadium development process.

#### Outcome-Related Impacts: "It Definitely Changed the Dynamic"

In the August 2012 interviews, respondents described outcome-related impacts. One interviewee said the literature cited in the HIA could be used for future community development projects. The respondent also cited benefits related to how resources were used, saying, "The HIA really helped to get at some of those broader reach issues without having to be out there door-knocking and engaging every individual separately." The same respondent said that HIA helped bring impacted residents to the conversation, saying, "By no means were we being called to join the table and now we're being called by numerous sources... to join the decision-making table...It definitely changed the dynamic." Around the time of the interviews for this paper, local HIA team members entered negotiations with the project developer, but the parties failed to reach agreement.

On September 28, 2012, after all interviews described above were completed, the Los Angeles City Council subsequently approved the proposed stadium plan. Council members did not require the project developer to make substantial changes to the project that would mitigate the predicted health impacts.

Following the City Council's decision, the Play Fair Farmers Field coalition, which included the membership-based HIA partner organization Los Angeles Community Action Network, filed a lawsuit based on a constitutional challenge to the State law that enabled a severely shortened California Environmental Quality Act process for this specific project. The coalition entered negotiations with the developer that this time culminated in a settlement. The settlement covered a wide range of community health benefits and measures, including \$15 million for affordable housing, a commitment to hire local residents for a substantial percent of jobs created, and separate funding for a community team to promote health and protect tenant rights in the surrounding area. Seven of the developer's commitments in the settlement related to rapid HIA recommendations (Legal Aid Foundation 2012).

#### **Discussion**

The inherent need for a rapid process due to resource constraints and short timelines can conflict with an established core value of HIA: democracy (Quigley et al. 2006; Harris-Roxas et al. 2011; Furber et al. 2007; Chilaka 2010). In HIA, democratic practice usually means engaging stakeholders and, in particular, vulnerable communities likely to be most impacted by the decision under consideration and least likely to already be participating in the decision-making process. Recent literature and guidance documents suggest that all types of HIAs must engage and respond to the concerns of impacted communities, while promoting empowerment and leadership within those communities (National Research Council 2011; European Center for Health Policy 1999). Documents published in the United States emphasize the importance of democracy in all HIA processes (Stakeholder Participation Working Group 2011; North American HIA Practice Standards Working Group 2010). However, in practice, this can be difficult when facing acute time and resource constraints.

A key takeaway from this work was that tapping into existing activities and interests of impacted communities and community organizations can be particularly advantageous in rapid HIAs. The pilot project for this model was integrated into existing work of the Los Angeles-based members of the HIA team, which facilitated the project's rapid timeline. Partner organizations were already spending resources on a related campaign in which the HIA brought leverage to a lawsuit that ultimately resulted in a settlement, and already had relationships with residents who would be impacted.

In addition, the process-related findings about engaging and empowering residents and achieving organizational goals are important outcomes of HIA practice, though practitioners do not always prioritize them. While these outcomes sometimes result from comprehensive HIA processes, which may have more time and resources devoted to stakeholder engagement, they are typically not achieved in rapid HIAs. The rapid HIA process described here provides a new approach that can be used to achieve these outcomes in a greater number of HIAs and under a variety of conditions.

#### Strengths and Limitations of the Model

The authors achieved a key aim of developing and piloting a model to integrate substantial community participation and empowerment into an HIA with an abbreviated timeline and limited resources. Residents set the scope of research, conducted a community survey, and came to consensus on findings and recommendations. During follow-up interviews, residents commented on the success, for example saying, "The HIA did a good job and helped our voice be heard." A strength of the rapid HIA model is recognizing that lived experience is a type of expertise beyond that of the people traditionally identified as experts—the subject matter experts here—who also bring a distinct type of expertise, and one that is not often considered by decision-makers.

This also represents a potential limitation of the model. The goal of lifting the voices of people likely to be impacted by public decisions may conflict with decision-maker biases, if they exist, that devalue public input. This tension could impede the HIA's ability to improve the health impacts of a decision.

The model also offered strengths in advancing the goals of organizations on the HIA team, informing decision-makers about potential health impacts not previously considered in the proposed decision, and building capacity for future work by providing information that can be used in other local development processes. The HIA did not substantially impact the final City Council decision; however, it succeeded as one part of a larger campaign that through negotiations with the developer led to changes in the stadium development proposal, including measures to improve health impacts of the plan.

#### **Future Directions**

Based on the experience with the Farmers Field HIA, the following future directions could be explored to improve the model or make it more widely applicable.

A goal of the model is to have the voices of impacted people included in decision-making processes. Some members of the HIA team agreed that this also was the goal of the stadium HIA. At the end of the process, however, other members of the HIA team questioned the final report's effectiveness in influencing the decision-making process because they thought that it did not provide additional evidence from scientific experts to challenge legally required processes. As with any HIA or planning process, it is important for partners to clarify the goals of the rapid HIA at the start of the project.

To achieve strong community participation, the rapid HIA required staff time and costs on par with a more comprehensive HIA, though the rapid HIA was completed in a very compressed timeline. A substantial amount of time was spent on three days of in-person meetings, engaging stakeholders, preparing materials for the rapid HIA process, research, and writing. In all, approximate time spent included 325 hours for Human Impact Partners staff, 215 hours for partner organizations in LA, 20 to 40 hours each for impacted residents, and 10 to 15 hours for each of the subject matter experts. Less time will be required in the future, as the process and materials are refined and as improved methods are developed. However, strong stakeholder participation and empowerment will always require a commitment of significant resources. Other health analysis tools could be used when the value of democracy is less critical to project goals.

Furthermore, the model will have to be modified for state or federal policy decisions. In the pilot project, the primarily impacted populations lived in adjacent neighborhoods surrounding the proposed stadium development. In state and federal decisions, greater distances and larger numbers of impacted populations, as well as potentially greater diversity among those impacted, may hamper success if the same process is used. In these circumstances, a panel of representatives of various constituencies can replace the impacted resident panel, but direct participation and empowerment of impacted populations is difficult.

#### **Conclusion**

The rapid Health Impact Assessment model described here addresses a potential conflict practitioners face between conducting an HIA with a short timeline and fully engaging community stakeholders in the process. A pilot project using the model worked within an ab-

breviated timeline, met many standards for HIA, engaged and empowered residents, and contributed to changes in the stadium proposal that benefit health. Substantial community participation, however, still required significant resources.

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Table 1: Overview of rapid Health Impact Assessment model

Week	Activity	Participants	Specific activities and outcomes
1-3	Screening	HIA team	The HIA team determines the value a rapid HIA would add to the decision-making process, whether completing it is feasible, and whether to move forward. The HIA team then secures funding, if needed.
4	Form impact- ed residents panel	HIA team	The HIA team develops criteria to participate on the impacted residents panel and recruits panel members.
4-6	Scoping meeting	HIA team and impacted residents panel  Optional: subject matter experts and other stakeholders	A one-day, in-person scoping meeting with the panel includes: introduction to HIA; discussion about the value of incorporating health into decision-making; review of the proposed decision that has been selected for the rapid HIA; and timeline for the impacted residents panel activities. The panel reviews, revises, and prioritizes two sets of previously prepared items: health determinants on which to focus and pathway diagrams/logic models that link the proposed decision to health through the determinants.
7-10	Assessment	HIA team  Optional: im- pacted residents panel	Based on outcomes of the scoping meeting, the HIA team collects readily available data. The HIA team and, when possible, the impacted residents panel collect primary data, such as through a convenience survey or focus groups. Using the data, the HIA team begins writing a report and preparing summaries for meeting presentations.
10	Assessment meeting	HIA team, im- pacted residents panel, subject matter experts Optional: other stakeholders	A one-day, in-person assessment meeting includes: a brief presentation (using popular education tools, if possible) about the existing-conditions data collected during the previous month; brief presentations by subject matter experts about the potential impacts of the proposed decision on health and health determinants; subject matter experts and HIA team answering questions from the impacted residents panel; impacted residents panel deliberating and building consensus on the likely health impacts of the proposed decision and qualitative aspects that include the direction, likelihood, magnitude, and severity of the impacts.
10	Recom- mendations meeting	HIA team, im- pacted residents panel, subject matter experts Optional: other stakeholders	A one-day, in-person recommendations meeting where the impacted residents panel, with input from the subject matter experts, develops and comes to consensus on recommendations that respond to identified health impacts. The panel also discusses how to use the HIA findings and recommendations in the upcoming decision-making process.
11-13	Reporting	HIA team and impacted residents panel	The HIA team writes a report describing the rapid HIA process, decision-making context, existing conditions data, and predicted impacts and recommendations identified by the impacted residents panel. The HIA team, subject matter experts, and, if feasible, members of the impacted residents panel review and revise the report, and develop communications materials for the HIA team and impacted residents to disseminate to decision-makers.

Table 2: Comparison of HIA minimum standards and pilot project

Minimum standard for HIA	How the rapid HIA pilot project addressed the standard
HIA informs a decision-making process in advance of a policy, plan, program, or project decision.	HIA process informed decision-making for the Farmers     Field stadium proposal before the City Council took its     final vote and the developer finalized plans.
2.1. HIA includes a scoping phase that comprehensively considers potential impacts on health outcomes as well as social, environmental, and economic health determinants, and selects potentially significant issues for impact analysis.	2.1. HIA team developed the initial scope and the impacted residents panel revised it in a daylong meeting. After considering potential impacts, the panel prioritized several topics on which to focus during the limited HIA timeframe.
2.2. HIA solicits and utilizes input from stakeholders.	2.2. HIA process incorporated input from the HIA team, impacted residents panel, and subject matter experts.
2.3. HIA establishes baseline conditions for health, describing health outcomes, health determinants, affected populations, and vulnerable subpopulations.	2.3. HIA team researched baseline conditions between the scoping and assessment meetings using the following data sources: Draft Environmental Impact Report, Los Angeles County Department of Public Health, United States Census, reports compiled by the Los Angeles Housing Department and the California Redevelopment Agency, and a convenience survey of community members.
2.4. HIA uses the best available evidence to judge the magnitude, likelihood, distribution, and permanence of potential impacts on human health or health determinants.	2.4. Impacted residents panel, with input from the HIA team and the subject matter experts, assessed the evidence to predict the magnitude, likelihood, and distribution of impacts.
2.5. HIA rests conclusions and recommendations on a transparent and context-specific synthesis of evidence, acknowledging sources of data, methodological assumptions, strengths and limitations of evidence, and uncertainties.	2.5. Impacted residents panel drew conclusions from existing-conditions data and with input from subject matter experts during the assessment and recommendations meetings. The panel discussed sources of data, assumptions, and strengths and limitations of evidence.
HIA identifies appropriate recommendations, mitigations, and/ or design alternatives to protect and promote health.	3. Impacted residents panel developed recommendations for the developer and for the City Council to protect health based on predicted impacts.
4. HIA proposes a monitoring plan for tracking the decision's implementation on health impacts/determinants of concern.	4. HIA report described a monitoring plan.
5. HIA includes transparent, publicly accessible documentation of the process, methods, findings, sponsors, funding sources, participants, and their respective roles.	5. HIA report is publicly available on websites and was disseminated to decision-makers. The report described the process, methods, findings, funders, participants, and roles.

Figure 1: Example of rapid HIA pathway diagram: Links between the proposed development and health outcomes through housing

#### Impacts of Proposed Stadium: Housing and Gentrification Proposed Stadium Demolition of Increased demand for existing housing housing High-end housing, Decrease in affordable hotels, and housing businesses prioritized over Decrease in housing affordable housing vacancy rates Increased cost of Increased poverty Increased communicable disease housing and basic necessities Decreased ability to afford Increased chronic disease (e.g., heart disease, diabetes) basic needs Increased renting to Increased displacement those with high incomes Increased stress, leading to poor mental health, decreased immune Increased push-out of Increased homelessness function those with lower Decreased stability Child development/education incomes outcomes decline, leading to Increased Decreased housing quality premature mortality and chronic and communicable disease discriminatory practices Change in neighborhood/ Decreased social cohesion and civic community culture

participation leading to poor mental

and overall health

#### Table 3: Excerpt from the pilot project rapid HIA report

As detailed by the impacted residents panel as well as the data cited [in the body of the report], it is likely that the proposed Farmers Field development project, without mitigation, will increase displacement and poverty and decrease housing affordability among most groups of local residents.

Displacement, as well as lack of housing affordability and poverty, will primarily impact Latino and Black populations, low-income people, families, young children, and seniors, as well as individuals who are permanently disabled, and it will disproportionately impact people living in neighborhoods close to the proposed location of the Farmers Field development.

The experiences of local residents, as well as data and the academic literature, indicate that as a result of displacement and lack of available affordable housing, vulnerable populations could experience the following negative impacts on the following health outcomes:

- Mental health—for example, leading to depression, stress, increased alcohol and drug abuse, suicides, Post-Traumatic Stress Disorder;
- Chronic disease—for example, leading to obesity from stress and respiratory illness from poorquality housing;
- Infectious diseases and emergency room visits—for example, from increased homelessness;
- Education-related health outcomes through changes in quality of education and educational attainment—for example, children who change schools frequently will not do as well in school, and children who have poor health outcomes will miss school more frequently; educational attainment is tied to income and, both through income and separately, to many health outcomes, including risky behavior; and
- Social cohesion, as a result of breaking up social networks; by providing mental and financial support, social cohesion impacts both mental and physical health.