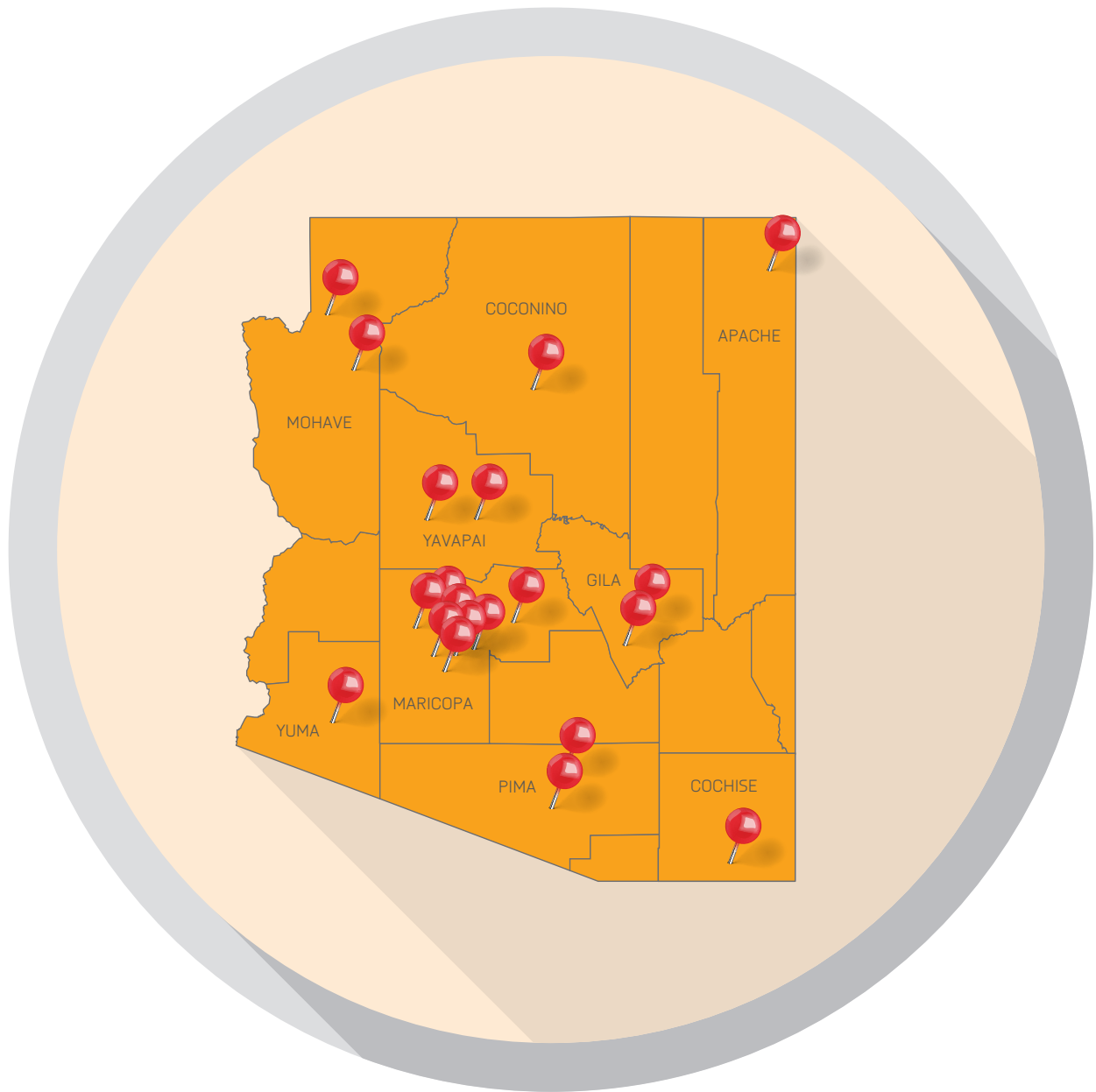


## Lessons Learned from Arizona

### Promising Practices for Health Impact Assessments



**November 2016** Health Impact Assessments (HIAs) are gaining popularity. As of 2015, 20 Arizona HIAs were completed or in progress as a means to anticipate health outcomes and make health-related recommendations for a potential policy, plan, program, or project.

# Promising Practices for Health Impact Assessments

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Health Impact Assessments (HIAs) are gaining popularity in the United States. While other types of impact assessments have become common practice,<sup>1</sup> the concept of a HIA is relatively new. HIAs emerged in Europe in the 1990s,<sup>2,3</sup> and were first documented in the United States in 1999.<sup>4</sup> Over recent years, views of health have shifted from a healthcare-driven approach to an acknowledgment of broader social determinants of health.<sup>5,6</sup> This shift has contributed to the increased popularity of HIAs in the United States.<sup>1,7</sup> Between 1999 and 2007, 27 HIAs were documented in the United States; by 2016, over 380 were completed or in progress.<sup>4,7,8</sup> HIAs are now considered “one of the principal ways to voluntarily incorporate health into mainly non-health sectors.”<sup>9</sup>

Although HIAs were introduced in Arizona later than other states, Arizona has mirrored the national trajectory. The first Arizona HIA was completed in 2010. As of 2016, 20 HIAs were completed or in progress. As noted by Bethany Rogerson with the Health Impact Project, “Arizona practitioners have conducted 20 health impact assessments in the last six years, provided a number of trainings, created a practitioner network, and have demonstrated that they are thinking about how to routinely bring health into decision making processes.” With the growing work on these assessments, there is an emerging community of HIA professionals in Arizona.

Here, we attempt to identify best practices within Arizona HIAs. While our research focuses on Arizona, the lessons

## What is a Health Impact Assessment (HIA)?

A HIA is a study intended to anticipate the health outcomes and make health-related recommendations for a potential policy, plan, program, or project. Typically, HIAs inform decisions that are not specifically health-related. Although most HIAs use quantitative data, the process is primarily driven by qualitative input from the community. The impact of a policy decision can never be measured or predicted with certainty, but a HIA investigates and identifies likely outcomes “...in order to better inform policymakers of all options.”<sup>6</sup>

The HIA process involves six steps:

1. **SCREENING**  
Decide whether or not the policy/plan/program/project is a good candidate for a HIA.
2. **SCOPING**  
Identify the breadth of the HIA, including which health effects will be considered.
3. **ASSESSMENT**  
Describe the health of the affected community at baseline. Anticipate the health outcomes of the policy/plan/program/project and identify who will be affected.
4. **RECOMMENDATIONS**  
Make recommendations to decision makers and other partners about what should be done to promote positive health outcomes, and minimize negative health outcomes.
5. **REPORTING**  
Document the steps, analysis and recommendations for communication with stakeholders, decision makers, and the community.
6. **MONITORING AND EVALUATION**  
Keep track of which recommendations have been implemented and investigate health outcomes over time.

*Health Impact Assessment. Center for Disease Control and Prevention. <http://www.cdc.gov/healthyplaces/hia.htm>. Updated March 19, 2015. Accessed October 2015.*

learned are applicable to other communities and consistent with challenges encountered nationwide.<sup>6,10,11</sup> Several studies review HIAs to examine what lessons they offer, but most of these studies consider practices worldwide or focus on the United States as a whole,<sup>6,10,11,12</sup> as opposed to focusing on a specific state or geographic region. However, many of the challenges and solutions Arizona practitioners have encountered match those documented by other HIA reviews.<sup>6,10,11</sup>

## Methods

To identify best practices, we interviewed a diverse group of 24 individuals (Appendix 1) who have participated in and conducted HIAs in Arizona, including project managers, epidemiologists, housing developers, providers of technical assistance, and stakeholders. Additionally, we captured feedback from organizations that have played a role in Arizona HIAs with interviewees representing 16 unique organizations and agencies. The interview format was semi-structured, following an interview guide containing open-ended, non-leading questions. The questions were adjusted to accommodate conversational flow and further discussion (Appendix 2). Each interview lasted anywhere between a half-hour to two hours. Seventeen were conducted in-person, and seven took place over the phone or via Skype.

## Overview of Arizona HIAs

The first Arizona HIA was conducted in 2010, by an Arizona State University undergraduate urban planning class. The assessment examined the health implications of a proposed Tempe streetcar. Since then, Arizona has completed or is nearing completion of 20 HIAs. The majority of Arizona HIAs have focused on addressing the built environment, specifically transit. However, as Arizona practitioners gain experience, topics are diversifying to include affordable housing redevelopment, recreational trails, shared use of school property, community garden ordinances, and county nutrition standards.

The Arizona Department of Health Services (ADHS) has overseen almost half of the HIAs conducted in Arizona, including most of the rural HIAs. ADHS typically provides funding, technical assistance, and expertise in system design, leaving the on-the-ground work to county health departments who are more familiar with the communities being studied. For many HIAs, the state received funding from national institutions and awards grants to local health departments or consultants to conduct HIA. The Centers for Disease Control and Prevention and the Health Impact Project have provided funding for the majority of Arizona's HIAs.

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## What's the Difference between a HIA and an Environmental Impact Assessment (EIA)?

An Environmental Impact Assessment (EIA) is similar to a HIA, but focuses on the *environmental* impacts rather than the *health* impacts. Unlike HIAs, EIAs are often required by federal law.<sup>13</sup> While some EIAs do examine health as an aspect of the study, the assessment is usually limited to a biomedical perspective – for example, the human body's reaction when exposed to a particular chemical.<sup>6</sup> In contrast, HIAs tend to consider health from a broader perspective and examine social determinants of health that are not traditionally associated with healthcare, such as neighborhood walkability.<sup>6</sup>



## Support for HIAs

As the practice of HIAs has grown in Arizona, so has the network of HIA practitioners. One such network of practitioners is the Arizona Alliance for Livable Communities, which advocates for health in all policies and focuses on HIAs.<sup>14</sup> The Alliance meets monthly to discuss progress on current HIAs.<sup>14</sup> Those interviewed spoke about the Alliance as a central figure in Arizona HIAs, a source of expertise, and a group that facilitates collaboration among professionals.



## Current and Completed Arizona Health Impact Assessments IN REVERSE CHRONOLOGICAL ORDER

Project	HIA Topic	Lead
Yavapai County Regional Mobility Management Implementation Plan	Public transit system to serve Yavapai County	Yavapai County Community Health Services
Active Transportation in Sierra Vista	Non-motorized transportation in Sierra Vista	PLAN*et
Hualapai Neighborhood Parks Land Use	Benefits of parks, including Hualapai Park, in Peach Springs	PLAN*et and Hualapai Tribe
Flowing Wells Roger Road	Infrastructure projects along Roger Road in Tucson	Pima County
Miami/Globe Schools Land Use Planning	Walking trail and school playground/park	PLAN*et Communities
Ganado/Burnside Traffic Circulation Study	Multimodal movements and circulation through Ganado and Burnside communities	PLAN*et Communities
Yuma Community Gardens	Community garden ordinance in Yuma	Yuma County Community Services District
Pinal Creek Trail	Trail along a portion of the Pinal Creek Basin in Globe	Gila County Division of Health and Emergency Services
Shared-Use Roosevelt	Community use of Roosevelt School District properties in South Phoenix	Maricopa County Department of Public Health
Tucson 12th Street Corridor Project	Streetscape for 12th Street in Tucson	Pima County Health Department
Sodium and Nutrition Standards Procurement Policy	Policies intended to modify the sodium content of foods provided by Maricopa County	Arizona State University Southwest Interdisciplinary Research Center
Rezoning to Allow for Standard Development	A private student housing development in Flagstaff	North Country HealthCare, Ame-Lia Tamburrini
Verde Valley Master Transportation Plan	An update of the 2009 Verde Valley Multimodal Transportation Plan	PLAN*et Communities, Yavapai County Health Services District
South Central Neighborhoods Transit	A proposed light rail transit extension in South Phoenix	Maricopa County Department of Public Health
Bullhead City Rotary Park	Expansion of an existing park in Bullhead City	Mohave County Department of Public Health
Madison Heights	Redevelopment of three Maricopa County Housing Authority properties in Avondale and Buckeye	Maricopa County Department of Public Health
Reinvent PHX	Transit-oriented development along the five "districts" that light rail follows through in Phoenix	Vitalyst Health Foundation
Coffelt-Lamareoux Public Housing Redevelopment	Redevelopment of Maricopa County Housing Authority property in Phoenix	Local Initiatives Support Corporation of Phoenix
Sycamore Light Rail Station	Development around a light rail transit station in Mesa	Arizona State University, Local Initiatives Support Corporation of Phoenix
Tempe Street Car	A modern street-car in Tempe	ASU students, Health in Policy & Practice (now known as the Arizona Alliance for Livable Communities)

# Lessons Learned

While effective practices may vary based on the topic of study, Arizona practitioners provided consistent observations and advice on conducting HIAs. All but one of the HIAs conducted in Arizona have studied the built environment, and these lessons learned apply most comprehensively to similar projects. However, the following observations can be applied to HIAs in general.

## 1 Secure adequate funding.

Financing HIAs is often complex and involves multiple funding sources that funnel through more than one institution. Typically, an agency receives a grant to oversee a HIA and hires contractors to help complete the work. An example of this structure would be the HIA conducted for Reinvent PHX, which was partially funded by a grant from the U.S. Department of Housing and Urban Development. The grant was awarded to the City of Phoenix, who hired the Vitalyst Health Foundation (formerly St. Luke's Health Initiatives) to conduct the HIA. Vitalyst Health Foundation hired subcontractors to complete most of the work and contributed additional funding to the project.

While monetary investment is essential throughout the course of a HIA, it is particularly crucial for community engagement and advocacy efforts, two steps where cost is often underestimated. Adequate funding can contribute to compensation for skilled and experienced consultants and team members. Projects that do not prepare for these costs often fail to gather and utilize important community feedback. Similarly, HIAs that do not include funding for post-assessment advocacy often fall short in implementing recommendations. While a large budget on its own cannot guarantee results, insufficient funds usually result in a more limited impact.

The most influential HIAs have access to adequate funding to support quality results given their scope. In contrast, other HIAs have struggled to make funding stretch and, in some cases, consultants have needed to put in more hours than they were paid for to complete the work. Underfunded HIAs often fail to influence decision making, essentially leading to no return on investment in terms of community impact. In many cases, the community impact of a larger budget is not merely incrementally higher, but instead represents the difference between no impact at all and a substantial one.

However, it can be difficult to estimate the funding required to see a HIA through to its completion. The funding required to produce impactful results varies widely, depending on the scope and context of the study. For example, urban HIAs have easier access to volunteers, interns, and partner organizations throughout the HIA process, which lowers the financial burden of the assessment. These partnerships

## Lessons Learned from Arizona HIAs

- 1 Secure adequate funding.
- 2 Form an interdisciplinary team and anticipate turnover.
- 3 Don't overlook the screening process.
- 4 Spend time building relationships.
- 5 Develop a flexible timeline.
- 6 Prioritize community engagement.
- 7 Quantitative data is useful, but limited.
- 8 Use a mixed-methods approach.
- 9 Be aware of politics.
- 10 Craft and follow through on meaningful recommendations.

can also be used to locate additional funding for conducting the assessment and implementing recommendations. The same budget may not yield the same results in a context where partners are less abundant.

Unfortunately, with the limited number of Arizona HIAs completed, there is not a good gauge of how much HIAs cost. However, practitioners broadly agree that: (1) the amount of funding awarded needs to vary according to the scope; (2) additional funding should be set aside to cover unanticipated costs; (3) HIAs generally cost more in rural areas than urban areas; and (4) most practitioners underestimate the cost of a HIA.

## 2 Form an interdisciplinary team and anticipate turnover.

THE PEOPLE INTERVIEWED FOR THIS REPORT, AND THEIR ROLE WITH HIAs, ARE LISTED IN APPENDIX 1.

HIAs tend to examine social determinants of health that fall outside of the traditional health arena. As a result, the HIA team should reflect an interdisciplinary approach and provide a wide array of insights.

*“We were able to get perspectives that one might not have normally thought of. From an epidemiologist standpoint, we tend to focus on the data side of things. From a policy perspective, they’re looking at where we can move forward. Valley Metro is focused on transit and making sure people can get around. Together we are all working towards improving the health and wellness of the community.”*

*Keely Muertos, Maricopa County Department of Public Health*

*“I think across the board, data is a challenge and having somebody who understands data thoroughly from a public health standpoint is really critical.”*

*Jane Pearson, LISC*

*“An HIA needs somebody who is skilled at framing and tailoring the message. They’re skilled in the politics behind the scenes as well. They have to be a person who builds trust quickly. You need someone who can speak more lay language and make it more understandable and have perseverance because it’s not a one-time conversation.”*

*Cynthia Melde, former Arizona Department of Health Services employee*

## Experience Matters

Practitioners emphasized that it is very difficult to conduct a HIA without at least one team member who has experience with HIAs or similar research. In most cases, technical assistance is not enough. Including an individual with HIA experience is not always easy, particularly in rural regions. However, a HIA is an enormous undertaking and without mentorship from a seasoned practitioner, it can be difficult to conduct a successful analysis.

## Building the Team

Those interviewed emphasized that a successful HIA team includes at least one person with the following skills or expertise:

FOR ALL HIAs	FOR BUILT-ENVIRONMENT-RELATED HIAs	FOR TRANSPORTATION HIAs	FOR HOUSING HIAs	FOR HIAs THAT EXAMINE AIR QUALITY
<ul style="list-style-type: none"> <li>Public health</li> <li>Epidemiology</li> <li>Community engagement</li> <li>Strong writing skills</li> <li>Networking, relationship, and communication skills</li> <li>Experience with health impact assessments</li> <li>Experience navigating politics</li> <li>Experience with research, including literature review</li> <li>Public policy</li> </ul>	<ul style="list-style-type: none"> <li>Urban planning</li> <li>GIS in an urban planning context</li> </ul>	<ul style="list-style-type: none"> <li>Transportation planning</li> </ul>	<ul style="list-style-type: none"> <li>Architecture</li> </ul>	<ul style="list-style-type: none"> <li>Environmental or air quality assessment</li> </ul>



### Communicating and Coordinating a Team

One of those interviewed suggests limiting the core team to a manageable number of people to avoid difficulties with communication and coordination. Several respondents said most teams were made up of four or five people.

Communication across disciplines can be challenging. It is important to not make assumptions about what others are familiar with, avoid unexplained field-specific jargon, and clearly describe new concepts. The team must be comfortable enough with one another to ask questions when concepts are unclear. Partnerships that extend beyond a single HIA make communication easier over time.

*“In our own disciplines, we have our own vocabulary so we have to learn to translate. There were times when I just wrote down words I didn’t recognize. I’m still not sure I know what form-based code is, but I would write it down and go research it. I never hesitate to ask questions.”*

*Pam Goslar, Dignity Health St. Joseph’s Hospital and Medical Center*

### Prepare for Turnover

HIAs can be long-term projects – lasting many months – and turnover is inevitable. Team members, decision makers, and stakeholders can change jobs over the course of a HIA, thus creating unavoidable challenges. Even when the team attempts to garner support from decision makers, changes in leadership, internally or externally, can alter the trajectory of a project considerably.

By receiving buy-in from high-ranking individuals, teams are able to minimize problems created by turnover among decision makers. In this way, even if the contact person leaves, the organizational culture and leadership is more likely to remain supportive of the HIA.

Internally, HIA team members may also switch jobs, which can cause confusion and delay. One interviewee recommends ensuring that other staff within the participating organizations are familiar enough with the project that a colleague is able to step in if a team member leaves.

### 3 Don't overlook the screening process.

Several informants noted that enthusiasm to conduct a HIA can cause practitioners to overlook key elements of the screening process. However, screening can be crucial to the success of a HIA. It does more than merely decide if a HIA should move forward.

## Case Study on Screening: NAIPTA

The Arizona Department of Health Services initiated a HIA on a Flagstaff bus rapid transit project that the Northern Arizona Intergovernmental Public Transportation Authority (NAIPTA) was considering. The HIA did not undergo significant screening. The HIA team worked with NAIPTA staff who supported the HIA, but were not in a leadership position. Simultaneously, Coconino County and the City of Flagstaff had upcoming elections with ballot initiatives that would increase

a sales tax to support street improvements. NAIPTA paused its work on the HIA over concerns about potential political ramifications and the

ballot initiatives. By the time NAIPTA set aside the project, the Arizona Department of Health Services had already hired a contractor to conduct the HIA. Some Arizona HIA practitioners believe that if the team had screened the project properly, they could have gauged the level of buy-in from NAIPTA leadership and avoided some of the political obstacles before investing so much in the HIA.



One of those interviewed said screening should serve several purposes. First, it evaluates if the project is a good candidate for a HIA. Consider the specific decision making process the HIA aims to inform, if health is already accounted for, and if a HIA will likely uncover any new information.<sup>15</sup> Also consider the HIA's feasibility given the available resources in terms of time, budget, data accessibility, political viability, and attention from decision makers. It is important to openly and objectively discuss these aspects as a team before further investment in the project.

If it is appropriate to move forward, another function of screening is to gather key information up front that can be used to anticipate and plan for future challenges. As soon as possible, the team should identify everything they can about the decision process, including how it is made, by whom, and what (if any) administrative or regulatory parameters they work under. It is important to evaluate the power dynamics, political landscape, and other potential challenges or limitations the team might encounter. The best way to do this is to meet with key decision makers and stakeholders, ask questions, and gauge their level of support.

Finally, the screening phase should also be used as an opportunity to educate decision makers and stakeholders about the HIA process. This is an opportunity to build relationships and support for the assessment.

*“The screening phase is not just about collecting information. The screening phase needs to be about education with the decision-making entity because HIAs are so new people don't know what they are.”*

*David Dubé, Maricopa County Department of Public Health*





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## Case Study: Relationships in Coffelt

In Coffelt, Gorman and the Housing Authority implemented almost all of the recommendations within their control. However, the HIA led to changes in the community beyond the housing property itself. The HIA team, along with Gorman and the Housing Authority built relationships with other partners and those partners implemented, and in some cases even funded, recommendations.

The Housing Authority and team reached out to the City of Phoenix to install a crosswalk across 19th avenue adjacent to Coffelt. The city has now installed a High Intensity Activated Crosswalk (HAWK). Likewise, the City of Phoenix Parks and Recreation Department agreed to fund the after-school program for Coffelt's children.

Additionally, Restore Arts Arizona now regularly sends a van with musical instruments to expose children to the arts. During community engagement exercises, residents discussed dog bites and stray dogs. Animal Care and Control has taken steps to address the problem by providing spay and neutering services. Because residents lacked access to healthy food retailers, the team worked with Fresh Express – a mobile produce vendor – to make Coffelt a regular stop on its route.

The Coffelt redevelopment began implementing and incorporating recommendations into the project before breaking ground. These successful outcomes can be attributed largely to relationship-building throughout the HIA process.

### 4 Spend time building relationships.

According to the practitioners interviewed, the relationships and networks of the HIA team are a strong predictor of a HIA's success. Relationships can help the team access quantitative data, connect with stakeholders and community members, influence decision makers, and build collaborative partnerships to implement recommendations.

#### Reach Out to Decision Makers and Nontraditional Partners

A strong relationship with decision makers heightens the exposure of a study's results, increasing the likelihood that recommendations will be implemented. Therefore, it is crucial to identify and target those individuals who have the power to move forward with the recommendations. This extends beyond the specific policy decision the HIA intends to influ-

ence, as some recommendations fall outside the control of the primary decision makers. To carry out such ancillary recommendations, the team should also pursue relationships with nontraditional partners. See 'Case Study: Relationships at Coffelt' for an example of this strategy.

*"You have to go outside the boundaries of what we'd normally see in terms of funding and partnerships to implement successes."*

*Brian Swanton, Gorman & Company, Inc.*

Several interviewees pointed out that these unconventional partnerships do not end when a project wraps up. Instead, work with organizations and agencies can give rise to long-term collaboration.

*"MAKE SURE IT'S ONGOING. HOPEFULLY IT DOESN'T JUST START WITH A HIA. WE'RE FORTUNATE ENOUGH TO WORK WITH OUR PARTNERING AGENCIES A LOT, AND I THINK THAT HELPS. WE PICK UP ON TERMINOLOGY; WE KNOW THE CAPACITY OF DIFFERENT AGENCIES. THEY KNOW WHAT THEY CAN COME TO US FOR; WE KNOW WHAT WE CAN GO TO THEM FOR."*

*Keely Muertos, Maricopa County Department of Public Health*

## Collaborate with Other HIA Professionals

HIAs can be sizable and overwhelming, especially for first-time practitioners. Several informants suggest reaching out to other professionals for advice and collaboration.

*“Being the only one doing all of that work was really isolating, and I needed someone to talk through this stuff with. Somebody that you can say at a meta-level ‘oh my gosh, here’s everything that’s going on, can you help sift through it?’ Nobody knew the details that I knew and I didn’t feel like I had somebody who I could talk to.”*

*C.J. Eisenbarth Hager, Vitalyst Health Foundation*

*“Don’t be afraid to ask for help, ask for advice. I would say probably 90% of the people who have been involved in HIAs would be willing to help. If you’re going to do a HIA, they would be willing to answer questions. They would probably be willing to come to meetings, and they would do it free.”*

*Dean Brennan, Project for Livable Communities*

## Strategies for Building Relationships

Building relationships is an important step to begin early in the HIA process. Often, teams start by engaging with their own existing networks. While these relationships are very useful, a successful team will leverage these relationships to connect with others. It is also important to engage with the individuals who hold decision making authority within an organization. One informant cautions that it can be dangerous to rely solely on existing connections. During the South Central Neighborhoods Transit HIA (SCNTHIA), the team produced recommendations that would have required action from several city departments. However, the team did not engage with the right people from the City of Phoenix and relied too heavily on people the team already knew, thereby limiting implementation impact.

## 5 Develop a flexible timeline.

### The Steps are Fluid: Revisit Previous Steps as Situations Change

The professionals we interviewed value practicality over strict adherence to the HIA model.

*“HIAs can be a useful tool in informing all kinds of different decisions, and...[we shouldn’t be] too purist in exactly how it’s applied...The important part of it is to incorporate health into decision making, use good tools, and bring in...partners [with a nontraditional] perspective.”*

*Curt Upton, former City of Phoenix employee*

The steps provide a framework to keep the team on track and they are particularly important for teams new to the HIA process. However, in reality, the steps usually overlap and the team should continue revisiting previous steps as needed. For example, screening and scoping overlap considerably because a HIA’s feasibility depends largely on its scope and vice versa.

*“...it’s an iterative process...not a recipe...scoping flows into assessment and once you do the assessment, you find out that something has come out that you didn’t know about, and some things that you thought were going to be issues drop off...You have to have enough flexibility to do the work.”*

*Jane Pearson, LISC*

Make sure that the steps adhere to the purpose of the HIA. In some cases, the funder might require the team to follow each of the six steps. If this is not the case, the team should not use limited resources on completing a step that is not valuable to the assessment. Most importantly, HIAs are intended to influence decisions and produce outcomes. A HIA is not a checklist; therefore, do not invest in steps that deviate from the goal.

First-time practitioners can underestimate the time a HIA requires. It is important to be realistic about the time commitment the HIA will demand from staff. A HIA cannot be completed as an add-on to fulltime responsibilities. Start with the decision makers’ timeline and work backwards, but build in flexibility to account for unanticipated delays. Most teams end up extending the timeline.

## Stay Organized and Communicate Regularly

Strong organizations ensure that communication does not diminish and the HIA continues efficiently. Plan regular team meetings to touch base and keep everything moving. It is important to give stakeholders and the community plenty of notice for community workshops, and send reminder and follow-up emails.

## 6 Prioritize community engagement.

While quantitative data provides context, teams rely on community engagement to capture the nuance of community life. Community engagement refers to the process of soliciting qualitative input from community members and stakeholders through strategies such as community workshops, focus groups, or interviews. Residents are experts in their neighborhoods and the right questions can uncover authentic information about behavior, community challenges, and opportunities for improvement. Community-driven HIAs gather input from the community at all stages of the assessment. Community buy-in is fundamental for sustainable change.

### Don't Underestimate the Costs of Community Engagement

Experienced community engagement facilitators are key, and for best results, the team should invest in trained facilitators rather than rely on volunteers. Thorough, authentic participation requires networking, participant recruitment, community workshops, data analysis, and skilled facilitation. Additional costs for community engagement include food and childcare during community workshops and participant incentives, such as gift cards. The community engagement budget should allow for unanticipated challenges. For example, when faced with a poor turnout at a community workshop, the HIA team may have to hold additional workshops until they meet their community engagement goal.

### Community Recruitment

Recruitment can often be difficult; however, a team member with community engagement experience will be familiar with strategies to improve participation. Some strategies include:

- Hold meetings during non-business hours; provide meals and childcare.
- Engage organizations that serve as community centers, and have earned the community's trust. Community members may be indifferent or mistrustful towards the government or unfamiliar organizations, but will often respond more positively when they receive an invitation from a trusted organization, such as a school or place of worship. These organizations can also participate in workshops directly and provide their own input.
- Work with community organizations to tailor recruitment and communication strategies to the context of the community. Most interviewees said that word of mouth worked best when facilitated by community organizations.



“THEN WE HAVE THAT EXTRA STEP OF CHECKING WITH RESIDENTS AFTER WE MADE THOSE RECOMMENDATIONS TO SAY “HERE’S WHAT WE HEARD FROM YOU. HERE’S THE DATA THAT WE FOUND. HERE’S WHAT WE’RE SUGGESTING. DOES THIS MAKE SENSE TO YOU?” SO THAT GAVE US A LOT MORE CONFIDENCE IN THE RECOMMENDATIONS WE MADE.”

*C.J. Eisenbarth Hager,  
Vitalyst Health Foundation*

Community organizations can represent the populations they serve, but there is no substitute for direct input from residents. Authentic engagement is particularly challenging when the HIA aims to reach underserved populations who face additional barriers. One strategy for achieving authentic participation is to tailor workshops to the target population. For example, in Reinvent PHX, the HIA team conducted several workshops completely in Spanish. This encouraged Spanish-speaking residents to attend and enabled the conversation to flow naturally.

## Participatory Mapping

Many who conducted a built-environment-related HIA emphasized maps as an effective tool to identify locations in the neighborhood, helping to generate conversation. HIAs that employed this strategy displayed large detailed maps to guide small group discussions (6-8 people per table works best). For example, in Reinvent PHX, facilitators asked participants to point to maps and identify health assets and challenges in their neighborhood. Participants placed stickers on the map to represent locations such as grocery stores that offered great produce and streets that struggled with loose dogs or inadequate lighting. For this method of engagement to be effective, informants noted that facilitators should create a relaxed environment, allowing substantial time for discussion to prevent participants from feeling rushed.

## Sharing Findings with the Community

Community input should occur at all stages of the HIA; before, during, and after the HIA is conducted. This process is a way to verify voices from the community. It provides them with a summary of findings from the HIA, along with recommendations that are tailored to the community's needs and priorities.

One interviewee emphasized that the community engagement process can also inform the types of quantitative data the team chooses to obtain. For example, residents might identify an intersection as dangerous to pedestrians, when the available statistics indicate otherwise. The discrepancy might result from underreporting of accidents, community misconceptions, or a more complicated social environment, such as residents avoiding the area because of its perceived danger, leaving data to indicate a lack of pedestrians rather than a lack of danger.

## 7 Quantitative data is useful, but can tell an incomplete story.

Quantitative methods are important for health education and for promotion specialists who want to contribute to evidence-based research and practice. However, when used alone or used to acquire more depth about a topic, they are not sufficient. To get the complete picture, it is important to understand and be able to apply qualitative research.<sup>16</sup>

*“Data is more of a guidance really. It shouldn’t be the determining factor. A lot of times, seeing the data just kind of brought it to life and solidified what the community thought was going on.”*

*Keely Muertos, Maricopa County  
Department of Public Health*

## Explore Existing Data Sources, Including Partner Agencies

Some sources provide publicly available data. However, each source may offer data for different geographic areas. For example, some data may only be available at the county level. If the HIA study area is a smaller neighborhood, county level data is useful for comparison, but does not describe the study area itself.

Teams are often unable to find data for their specific study area, but instead rely on data from larger neighborhoods as an estimate. Data was unavailable on the residents of the Coffelt or Madison Heights housing projects specifically. Therefore, the HIAs relied on zip code level data, which provide a closer estimate than data from the entire county.

For geographically-specific data, epidemiologists recommend reaching out to government agencies. For instance, county health departments can provide vital statistics and hospital discharge data for small areas. Some agencies cannot provide raw data because of confidentiality concerns, but they can assist with data analysis and provide statistics.

*“There are multiple locations. The county health department has certain information. The state health department has certain information. Sometimes the Centers of Disease Control and Prevention has two versions of the same census. One advantage of an epidemiologist is that they know all this stuff.”*

*Dean Brennan, Project for Livable Communities*

*“There’s really good data at places like fire stations. Schools do assessments every year. Some of that data is raw, but it’s also pretty good. So I think you just have to be a little creative about where you get the data.”*

*Leslie Dornfeld, PLAN\*et Communities*

Agency attitudes toward data sharing vary. Some agencies are enthusiastic to partner, while others hesitate to share information for bureaucratic, political, or privacy reasons.

*“People aren’t really forthcoming, possibly because we are asking for health data and people don’t like giving out that information. I also think that if the data shows there are health issues in a community, some of the providers may think the HIA will say that they are not doing a good job, which is not the purpose of an HIA.”*

*Leslie Dornfeld, PLAN\*et Communities*

## Acknowledge Limitations; Don’t Mislead or Overstate Findings

One informant cautions that even when data is available for small geographic areas, sample size is usually small. Small sample sizes limit the inferences that can be drawn and create problems with confidentiality. She warns that a small sample size can be misleading and overstate differences between locations.

*“...the challenge has been data around small areas and how do you actually do any quantitative data analysis...If you only have one or two incidents... [of something,] it doesn’t mean anything. So you can have a premature birthrate... [that is] high, but when you really get down to it, it’s two babies. You can’t do anything with that.”*

*Jane Pearson, LISC*

## Value of GIS and Maps

Maps are helpful for visualizing data and problem locations. For example, in SCNTHIA and the Shared-Use Roosevelt Health Impact Assessment, the epidemiologists used a map to diagram the food options available in the study area. Food vendors were registered with environmental services, so they were able to document where healthy options were, and which vendors accept benefits for the Special Supplemental Nutrition Program for Women, Infants, and Children.

*“Maps helped community members and stakeholders better interpret some of the data we were presenting. Sometimes seeing some of those hotspots where things are more prevalent, such as crime or dog bites really brings it in perspective.”*

*Keely Muertos, Maricopa County  
Department of Public Health*

## Present Data with the Audience in Mind

The epidemiologists interviewed warned that communicating about data with team members and the community can be challenging. One epidemiologist says that it is important to present data to community members and allow them to provide input. However, she recommends presenting only data related to key points and not attempting to explain all the details.

*“As epidemiologists we get really excited. There is an overwhelming amount of data and we just want to share it. In SCNTHIA, we went in there showing all the information that we thought was valuable and it was a lot to take in for community members. We learned to stick to key points that you think the community members are going to appreciate based on concerns that they’ve already expressed. Then, allow them ample time to ask questions, elaborate on that data and then put in requests for additional data.”*

*Keely Muertos, Maricopa County  
Department of Public Health*

**“WITH ANY HEALTH DATA THERE ARE ALWAYS GOING TO BE LIMITATIONS, AND THAT’S JUST SOMETHING WE ALL HAVE TO ACCEPT. BUT IT IS THE BEST THAT WE HAVE AND WHETHER OR NOT IT’S A COMPLETELY ACCURATE DESCRIPTION, IT STILL PAINTS A PICTURE OF WHAT’S HAPPENING IN ONE’S COMMUNITY.”**

*Keely Muertos, Maricopa County Department of Public Health*

## 8 Use a mixed-methods approach.

Use multiple methods to obtain information about the study area.<sup>17,18</sup> According to qualitative methods expert Michael Patton, “In early literature on evaluation methods the debate between qualitative and quantitative methodologists was often strident. In recent years the debate has softened. A consensus has gradually emerged that the important challenge is to match appropriately the methods to empirical questions and issues, and not to universally advocate any single methodological approach for all problems.”<sup>18</sup>

Each qualitative method can inform subsequent HIA activities that are community-driven rather than intended to prove a hypothesis. HIAs provide an opportunity to supplement quantitative, epidemiological data with information-rich qualitative data, such as input from community residents. For example, in Reinvent PHX, facilitators asked participants during the mapping exercise to identify where they typically walk and bike. The heavily used routes were then selected for street audits. The street audits involved residents going to the identified areas and documenting their observations (road condition, driver behavior, etc.). Residents were then able to explain attributes of the area in more specific terms, which ultimately led to more specific recommendations.



The qualitative data gathered for Reinvent PHX offered context-sensitive recommendations for key stakeholders to digest, in contrast to epidemiological data alone. The quantitative data alone, for example, would not have revealed the root cause of the pedestrian-related fatalities. The community engagement process revealed unexpected pedestrian challenges associated with liquor stores and methadone clinics in neighborhoods that had a prevalence of substance abuse, harassment, and other safety threats to pedestrians. Community members explained that in order to avoid threatening social interactions around those places, they altered their walking route despite the presence of marked crosswalks.

These findings were used to develop recommendations for policies and practices that promote a healthy environment around liquor stores and methadone clinics. Quantitative data can be used as a starting point for the conversation with community residents, who can then elaborate on evidence of the health concern and provide an additional layer through which the team can understand the priority concerns for the population. This process facilitated future improvements that would not have resulted from the numbers alone.

## 9 Be aware of politics.

Decision makers and stakeholders are often initially skeptical about HIAs, however key-informants reported a change in initial negative attitudes as they became more familiar and aware of the process.

Concerns stem largely from a misunderstanding or lack of familiarity with HIAs. Some may be concerned about uncovering uncomfortable issues that might subject them to liability or negative publicity. As Amanda Luecker points out, caution is understandable as some stakeholders and decision makers have a lot at stake.

*“Some people don’t want to know the bad things about their community... because then you have to respond.”*

*Gloria Munoz, Housing Authority of Maricopa County*

*“We do have a lot at stake and we are trying to get a mission accomplished. Valley Metro is very dedicated to bringing light rail and other transit services to the region. I would hate for misinformation and/or misunderstandings to cause problems with achieving that goal.”*

*Amanda Luecker, Valley Metro*

*“Another challenge is you can bring bad news to the table...[Y]ou’re bringing issues up that are uncomfortable...For Coffelt, because it was in an environmentally challenging neighborhood, that made it hard...I think the Housing Authority faced some pushback about the decision to redevelop rather than just tearing it down, and they may even have lost some grant funding because of that...”*

*Jane Pearson, LISC*

*“I DIDN'T EVEN KNOW WHAT ONE (AN HIA) WAS BEFORE WE STARTED THIS PROCESS AND I WENT INTO IT FAIRLY SKEPTICAL. [I WAS] CONCERNED ABOUT WHERE THIS WOULD LEAD AND HOW THAT MIGHT AFFECT MY WORLD AND MY DAY-TO-DAY JOB TO DELIVER ON ALL THE PROMISES I HAD TO THE HOUSING AUTHORITY...[BUT] REALLY ALL IN ALL IT WAS A GREAT EXPERIENCE AND VERY MULTI-DISCIPLINARY...”*

*Brian Swanton,  
Gorman & Company, Inc.*

## Educate Decision Makers and Frame Recommendations Carefully

HIA practitioners recommend dealing with political issues in two ways.

First, informants recommend educating decision makers to ensure they understand the process and that they realize that a HIA is intended to inform decision making and improve community health, not to make anyone look bad or advocate for or against a policy.

One of those interviewed explained that most people are not accustomed to thinking about health from a broad perspective. The HIA team must explain how the decision maker's work affects health and how a HIA would benefit their work. To educate decision makers, another informant recommends developing an "elevator speech" about HIAs.

Second, informants suggest practitioners frame communication and recommendations carefully to avoid provoking political opposition. Most practitioners hesitate to censor recommendations as a HIA is designed to remain unbiased, even when facing tough political opposition. Usually, teams settle for a strategy that limits recommendations to those that are realistic and carefully phrased without omitting any information the HIA uncovers.

For example, in the Reinvent PHX report to the City Council, the team included all relevant issues, despite the political context, while recommendations were limited to those that were politically viable. Though the team recognized that some matters were uncomfortable to address, the purpose of a HIA is to bring these issues to light. One contentious issue that was discussed was the tension between residents and police, despite reluctance from city staff to have this conversation. The HIA team felt strongly that the poor police-resident relationship affected community health. Ultimately, the team decided to back down on the tone of the discussion, although some members regret doing so.

Those interviewed expressed that the most successful strategy for careful messaging is to frame uncomfortable issues as obstacles that have solutions. It is important to avoid coming across as critical, but to instead highlight opportunities for improvement. This avoids blaming agencies or individuals for conditions while it focuses on potential successes.

*"In the future I'll pay more attention to how that information is portrayed... sort of couch those things as more obstacles that have solutions to them as opposed to significant environmental conditions...[S]hare the same information, just express it in a different manner."*

*Brian Swanton, Gorman & Company, Inc.*

"PART OF A HIA AT THE BEGINNING IN DEVELOPING THE SCOPE IS TO TALK ABOUT THE SOCIAL DETERMINANTS OF HEALTH. MAKING SURE THAT EVERYONE GETS IT BEFORE YOU MOVE FORWARD IS A BIG THING. FROM A PUBLIC HEALTH STANDPOINT, WE JUST ASSUME THAT EVERYONE GETS IT BECAUSE WE DO, BUT PEOPLE WHO DON'T HAVE THE SAME BACKGROUND AS US AREN'T GOING TO GET IT."

*Kenneth Steel, Maricopa County Department of Public Health*



## 10 Craft and follow-through on meaningful recommendations.

Each recommendation should precisely identify a desired action and target a specific audience who has the ability to carry it out. Additionally, prioritize recommendations to ensure that the team pursues outcomes associated with the best health effects while considering the cost and community priorities. The team and the community should continuously advocate to implement the prescribed recommendations.

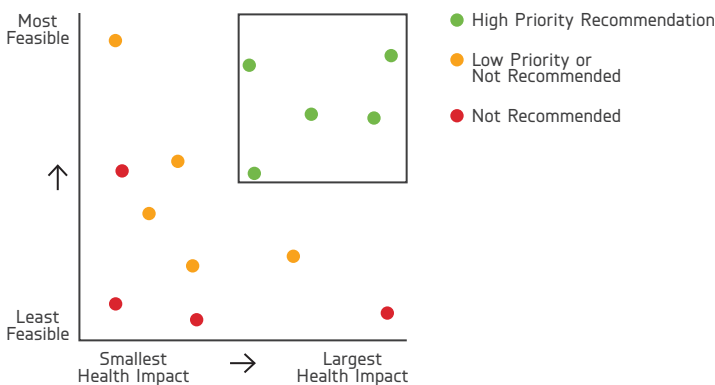
### Be Specific

While HIAs recognize broad goals, recommendations should clearly communicate a desired action. Recommendations should be specific, measurable, achievable, results-focused, and time-sensitive. For example, “improve air quality” might be the ultimate goal, but it is not a useful recommendation because it is vague and does nothing to solicit action. A more effective recommendation identifies an action that contributes to that goal, such as “the Housing Authority of Maricopa County should enact a non-smoking policy in all housing units by the year 2020.”

### Be Realistic and Prioritize

Given the political context, along with limited funding, time, and political will, the community and the HIA team should carefully consider which proposed recommendations are most feasible and impactful. Decision makers will take the HIA more seriously if the team understands the constraints that decision makers face, approaches decision makers with realistic requests, and avoids confusion by presenting only a limited number of recommendations.

### Prioritize Recommendations



*“I’m far more impressed with both of these HIAs (Coffelt and Madison Heights) than I ever thought I would be, largely because the recommendations... were very practical...implementable. They weren’t pie in the sky, academic, impossible to fund...They didn’t talk about covering a ten-acre site with a solar array canopy. That’s impossible to do. We’d never be able to fund something like that.”*

*Brian Swanton Gorman & Company, Inc.*

Prioritizing recommendations can be challenging, because it is difficult to anticipate exact costs, health impacts, and responses from decision makers. It may be a good idea to prompt the community to think deliberately about what trade-offs they are willing to make. In Shared-Use Roosevelt for example, facilitators used a sticky board (the concept is illustrated below) and asked the community to place each recommendation on a graph that compared feasibility and health impact, which enabled the community to visualize trade-offs and compare recommendations to one another. This tool permitted continuous discussion and adjustment of each placement.

### Know the Audience

Think about what is important to the audience and frame the message accordingly. The team should engage with decision makers to learn about their priorities and the context of their decisions. In SCNTHIA for example, Valley Metro was supportive of the HIA, but they were not accustomed to abstract discussions or public health language. One informant suggested that Valley Metro is more receptive to specific instructions when written using the infrastructure-focused language with which planners are familiar.

*“As a transit planner I might look at something as a public health issue, but in terms of how I can manage it at Valley Metro it helps to translate health concerns into something more infrastructure focused. I may have few to no opportunities to remedy a concern such as “there are too many dog bites at this location,” however I work every day to help improve street and transit infrastructure so the public experiences a safer traveling environment.”*

*Amanda Luecker, Valley Metro*

Anticipate and carefully navigate political concerns. Highlight opportunities to improve uncomfortable conditions instead of placing blame. Finally, use terminology the audience will understand and avoid unnecessary complexity.

## What Format Works Best?

A full-length report is important, because it provides a comprehensive analysis and outlines methodology. However, a full report is too cumbersome for most audiences, especially decision makers. Therefore, the team should consider the target audience and create additional documents to communicate according to their needs, such as an executive summary or fact sheet. Decision makers and community members often respond best to executive summaries and short, visually-appealing fact sheets that highlight recommendations. Those that intend to implement recommendations can focus on relevant topics and refer to corresponding sections of the full final report. Online executive summaries can provide direct links to more detailed sections of the full report.

One interviewee recommends that the executive summary should focus on the audience and clearly identify the action the document intends to solicit. Another informant suggests that an executive summary should be more visual to illustrate the message and maintain reader interest.

*“In what format will the report be used within the decision making criteria? I’ve got this 180-page SCNTHIA report. It goes on and on and is not useful to Valley Metro. Even the executive summary isn’t something they said they can use. So I’m going back and characterizing the impacts targeted very much on what they (Valley Metro) are going to do, what we think their highest priorities are.”*

*David Dubé, Maricopa County  
Department of Public Health*

Another respondent recommends investing time and funding to communicate recommendations to multiple audiences through more than one medium.

*“I would recommend...a really good communication strategy...so that the results of a HIA can be made accessible and widely...digestible and distributed through the media, through social media...[to] different audiences....everything from policymakers and government staff all the way down to a parent at their PTO...If you have a strategy that can widely distribute the recommendations...and make that accessible for someone who’s not going to read a 100-page HIA document...that would really help the impact of...the HIA...”*

*Curt Upton, former City of Phoenix employee*

## Follow Through to Ensure That the HIA Generates Tangible Change

Interviewees expressed frustration that, more often than not, HIAs end when the report is complete. They emphasized that a HIA should be viewed not as an academic work, but as a mechanism for change. A HIA’s purpose is to influence decision making and the steps necessary to do so should not be treated as an afterthought.

*“It’s a really valuable tool and I think it’s worthwhile investing in, but the end goal is policy change, not a HIA that can be published in an academic journal. We should keep our expectations focused on impacting community health and using it as a tool, not an end in and of itself.”*

*C.J. Eisenbarth Hager, Vitalyst Health Foundation*

However, HIAs are often conducted on long-term projects. Such a timeframe makes it difficult to advocate for and track recommendations that might take months or years to carry out. Additionally, a HIA’s funding usually ends when the report is finished, with no funding allocated toward implementation. The most successful HIA teams have dedicated efforts toward advocacy and implementation after the study was complete and included these efforts in their timeline and budget. At the beginning of the project, the team should work with its funder to account for this step and designate staff who will be responsible for it.

Advocacy is project-dependent, but involves meeting with key decision makers, attending public meetings and hearings, and promoting the recommendations from the HIA. Advocates should rely on relationships with decision makers, organizations, and agencies who have the ability to adopt recommendations.

One informant recommends reaching out not only to organizations and agencies that can implement recommendations directly, but also presenting the HIA to boards of partnering organizations that might be able to provide resources, collaborate with advocacy efforts, and leverage additional funding.

*“Lots of folks, and myself included, look to the public sector to implement these things, but the HIA also told me where we as an organization should be spending our time.”*

*C.J. Eisenbarth Hager, Vitalyst Health Foundation*

“...IF I HAD TO DO THIS...OVER AGAIN, I WOULD HAVE...NOT ONLY [TAKEN]...RECOMMENDATIONS TO THE CITY COUNCIL...[BUT ALSO TO THE]...BOARD OF EVERY...ORGANIZATION THAT HELPED ON THE PROJECT AND GOTTEN [THEM] TO VOTE AND APPROVE THOSE RECOMMENDATIONS. AND THEN YOU WOULD HAVE A TRUE COALITION... LEVERAGING RESOURCES...SAYING ‘ST. LUKE’S HEALTH INITIATIVES [NOW VITALYST HEALTH FOUNDATION] IS PUTTING \$100,000 TOWARDS THIS, WHY AREN’T WE?’ THAT’S A GOOD LEVERAGE POINT FOR DISCUSSIONS WITH THE CITY, BUT...ALSO VICE VERSA...‘LOOK, THE CITY HAS PUT A LOT OF EFFORT INTO THIS. WE CAN’T GET THERE WITHOUT HELP FROM PEOPLE OUTSIDE THE CITY AS WELL...THEN YOU HAVE A GOOD STORY TO KEEP BUILDING THAT SNOWBALL.”

*Curt Upton, former City of Phoenix employee*

Coffelt and Madison Heights represent an ideal situation because the developers and owners (both decision makers) were supportive of the HIA and involved from the beginning, so they agreed to implement recommendations without persuasion. Additionally, with the help of the HIA team, they took it upon themselves to further advocate to other institutions for recommendations outside their own control.

Reinvent PHX on the other hand was more challenging, because the project was large and complex, evolving over a two-year time span and encompassing five separate HIAs and additional research reports. Despite these challenges, Vitalyst Health Foundation took the initiative to continue engaging with the community and advocate for recommendations. Vitalyst Health Foundation also provided the funding for these follow-up efforts which was a key strength of the project.

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## Case Study for Follow-Through: Reinvent PHX

Reinvent PHX was a long-range planning process that focused on the neighborhoods along the Light Rail within the City of Phoenix. In addition to focusing on traditional urban planning elements, such as affordable housing and economic development, the City included health as a main focus. Vitalyst Health Foundation partnered with the City to oversee the health element. As determined by the scope, Reinvent PHX focused on three elements that influence health at the neighborhoods level – access to healthy food, access to safe recreation spaces, and a street environment that encourages walking, biking and taking public transit.

As a health foundation, Vitalyst was able to take steps to ensure implementation of the HIA recommendations. These recommendations included adopting Complete Streets ordinances, adding pedestrian infrastructure to and around the Grand Canal, and developing a food policy council to tackle some of the larger food system issues that were uncovered by the Reinvent PHX process.

Additionally, Vitalyst Health Foundation awarded an unrestricted \$5,000 grant to each of the five resident-led steering committees. The committees could use this funding for any of the priorities identified during the Reinvent PHX planning process.



## Advocacy Players: Who Are They?

Most successful HIA advocacy efforts have relied on members of the HIA team as key advocates. However, HIAs are intended to be community driven and owned.

In practice, this is difficult to achieve, and even teams that intend to continually involve the community should remain engaged and drive the process forward. Additionally, if the team wants the community to play a leadership role, it should provide them with tools to enable their continued efforts and success. For example, the grants provided to steering committees in Reinvent PHX supported the community's long-term involvement.

Advocacy can be particularly challenging for government entities, because of lobbying restrictions. Consider these challenges when selecting the advocates. Sometimes a team member unaffiliated with the government is the best option. Professionals mentioned the possibility of turning to a third party organization such as the Arizona Alliance for Livable Communities to fill this role.

"IT'S HARD WHEN YOU'RE LEADING A HIA, FOR THAT PROJECT NOT TO BE VIEWED AS A HEALTH DEPARTMENT HIA OR ST. LUKE'S [NOW VITALYST HEALTH FOUNDATION]. IT'S SUPPOSED TO BE A COMMUNITY-OWNED, COMMUNITY-DRIVEN PROCESS AND THAT'S WHEN IT'S GOING TO BE MOST EFFECTIVE."

*David Dubé, Maricopa County Department of Public Health*

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## Unique Challenges for Rural HIAs

HIAs that focus on rural areas face unique challenges, both in Arizona and nationally. Funding difficulties are often amplified in rural contexts, reflecting broader political circumstances and funding challenges. Additionally, HIA grants often provide less funding for rural HIAs as compared to their urban counterparts. The real and perceived funding and resource differences can result in tension. However, practitioners have formulated strategies to facilitate successful HIAs regardless of the focus area, and they emphasized the importance of investing in HIAs in rural places.

In addition to broader institutional funding issues, rural HIAs struggle with funding for two reasons. First, most of the grants awarded to rural areas in recent years have followed a rigid funding structure, which provides a fixed amount for each HIA regardless of scope over a rigid timeframe. Funding cannot be adjusted according to the needs of the specific HIA. The amount awarded is not enough for most HIAs to generate results, and it is difficult to carry-over funds from year-to-year if teams need more time. Secondly, HIAs cost more in rural areas, even for projects of comparable scope. Rural health departments often rely on consultants, most of whom are concentrated in urban areas, which increases travel costs. Additionally, in urban areas, teams benefit from more opportunities to leverage additional external funding and resources. Less density in rural areas mean fewer nonprofits, universities, and other partners who can help make the HIA more cost-effective.

However, HIAs can work well in rural areas. For example, the Ganado/Burnside Area Traffic Circulation Study was successful. It focused on a rural community in the Navajo Nation of northeastern Arizona. The HIA helped inform multimodal transportation planning decisions. With the help of a translator who spoke Navajo, the HIA team was able to dedicate effort and resources to engage with the local stakeholders and community, and respond to their unique needs. More flexible and sustainable funding, along with a model for addressing local health department capacity issues, can help replicate and expand upon this success.

## Moving Forward in Arizona

Key informants unanimously agreed that HIAs are a valuable tool and they made some suggestions about how to facilitate productive HIAs moving forward.

One practitioner recommends a stronger focus on education to inform decision makers about what a HIA is and how it can benefit a community, “so it becomes an accepted process.” This includes educating the public about HIAs and communicating with policymakers and potential end users. Presenting at conferences, creating webinars, or providing materials for organizations, such as the Arizona City Managers Association and the Arizona Chapter of the American Planning Association, are several suggested next steps. However, another informant cautioned that end users and policymakers are busy, and communication should be concise and tailored to the audience.

Informants agreed that Arizona should continue to pursue additional funding, but also invest existing funds strategically, focusing on HIA quality over quantity. The most influential HIAs have access to adequate funding to support quality results given their scope. In contrast, underfunded HIAs have struggled to make an impact. To support robust, sustainable, HIA best practices, practitioners should ensure that funding coincides with the scope of the work. However, without a clear estimate of the costs associated with HIAs of any given size, it is difficult to make sophisticated decisions about how to allocate resources. Even HIAs with comparable scopes might demand widely different levels of financial support depending on relevant circumstances. Therefore, it would be worthwhile to examine completed HIAs and attempt to pinpoint cost guidelines for HIAs of specific sizes and contexts. Such information would enable more strategic investment of resources to maximize consistent positive outcomes and cost-effectiveness of HIA work.

In addition to funding, the Arizona Alliance for Livable Communities can continue to facilitate HIA success. Practitioners emphasized that the Alliance has the potential to play an even larger role. Several interviewees mentioned that if the Alliance could secure consistent funding, it would be able to build capacity to conduct HIAs itself.

“THE TRAININGS THAT I’VE BEEN TO ARE SO TECHNICALLY DRIVEN BY PRACTITIONERS... [I]F YOU’RE TRYING TO CONVINCE MORE PEOPLE LIKE ME TO DO THESE, I DON’T WANT TO SIT THERE FOR SIX OR EIGHT HOURS LEARNING ABOUT THE ENTIRE PROCESS... GIVE US A TWO- OR THREE-HOUR SESSION WITH FOOD AND ENGAGE US IN A PROCESS TO LEARN...WHAT A HIA IS AND BEST PRACTICES.”

*Brian Swanton,  
Gorman & Company, Inc.*



This would free HIA teams from government restrictions for lobbying, cultivate skillsets, and create a HIA funding pool. The funding could be used in part to fund long-term implementation and evaluation efforts for a variety of projects. Interviewees also suggested that the Alliance obtain and organize data from multiple sources, decreasing overlap and increasing data access.

Another key to advancing HIAs in Arizona is building a community of practitioners. Arizona now has a small network of practitioners who are trained and experienced with HIAs, and it would be useful to bring them together to further collaborate and share advice. To some extent, the Alliance facilitates these relationships, but meetings allow for only quick updates rather than time for more in-depth collaboration. One informant suggests that the Alliance should

create a list of HIA practitioners and related consultants that includes their skillsets, the HIAs they worked on, and contact information. The list could be used as suggested contractors for HIA projects and potential colleagues and advisors.

HIA practice continues to evolve at a state and national level. HIAs have been instrumental in helping communities address their priority concerns and achieve a better quality of life. As a state, Arizona should continue to pursue additional funding, invest existing resources strategically, build capacity and institutional support, and pursue innovative topics.

A HIA is just one tool for incorporating health into decision making. Ultimately, HIA practitioners aim to increase awareness about the determinants of health until health is considered in all policies.

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## Topics for Future HIAs in Arizona

Interviewees spoke positively about continuing to use HIAs for housing and transportation projects because the topics are strongly correlated with health.

Suggestions for future HIAs topics:

- Education (including funding sources, budget, school siting, integrating physical activity in classrooms and playgrounds)
- Employee policies (such as sick days, parental leave)
- Minimum wage
- Highways or roads
- Bus lines or circulators (although buses are re-routed more frequently than light rail)
- Tobacco policies (such as a smoking ban for multi-unit housing)
- Criminal justice (recidivism and reintegration)
- Law enforcement
- Prescription drug abuse
- Behavioral and mental health issues
- Immigration policies
- Policies and development projects on Indian reservations
- Mining
- Multiunit housing projects in vulnerable neighborhoods
- Obesity prevention
- Improving neighborhood walkability
- Shared use beyond schools
- Brownfields (turning them into parks, gardens, etc.)
- Air quality during construction

“EVENTUALLY IT SHOULD BE THE CASE THAT YOU DON'T NEED TO DO A HIA BECAUSE... EVERYTHING AFFECTS HEALTH, AND WE'RE ALWAYS CONSCIOUS OF THAT. SO ESSENTIALLY YOU WORK YOURSELF OUT OF A JOB, BUT THAT'S WHAT YOU'RE SUPPOSED TO DO.”

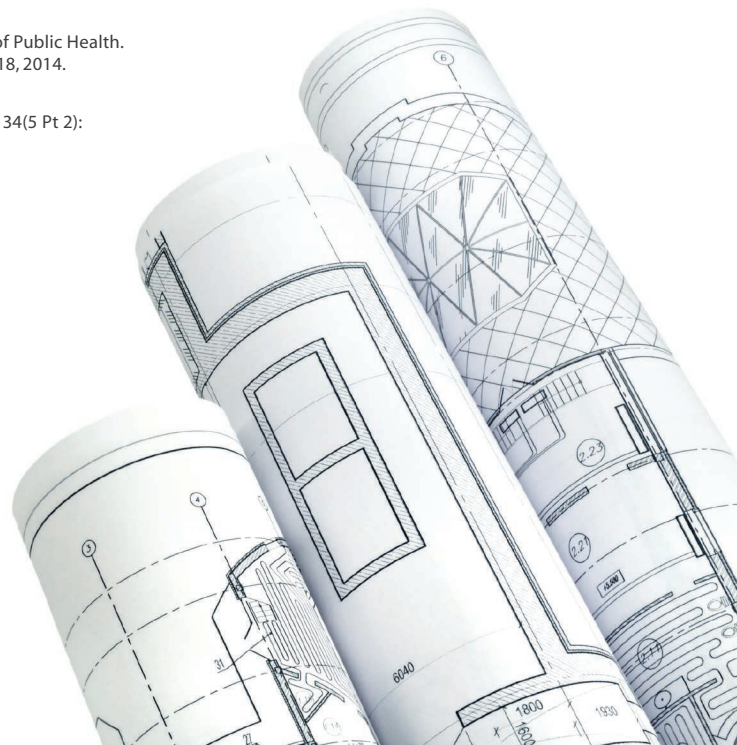
*Mia Stier,  
former Sonoran Institute employee*

# Acknowledgments

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## Appendix 1: Interviewees

Contact	HIAs	Role
<b>Dean Brennan</b> Project for Livable Communities dean.brennan@asu.edu	Reinvent PHX, SCNTHIA, Shared-Use Roosevelt, Tempe Street Car Project, Sycamore Light Rail Station, Pinal Creek, Miami/Globe Schools Land Use Planning	Practitioner, technical assistance, supporter
<b>Leslie Dornfeld</b> PLAN*et Communities leslie@plan-et.us	Miami/Globe Schools Land Use Planning, Bullhead City Rotary Park, Ganado/Burnside Traffic Circulation Study	Practitioner
<b>David Dubé</b> Maricopa County Department of Public Health daviddubé@mail.maricopa.gov	SCNTHIA, Madison Heights	Practitioner, advisory, supporter
<b>Holly Figueroa</b> Southwest Interdisciplinary Research Center Holly.T.Lewis@asu.edu	Shared-Use Roosevelt, Maricopa County Sodium and Nutrition Standards Procurement Policy Assessment	Researcher, practitioner
<b>Pam Goslar</b> Dignity Health, St. Joseph's Hospital and Medical Center pam.goslar@dignityhealth.org	Reinvent PHX	Epidemiologist
<b>Alex Gutierrez</b> Pima County Health Department Alex.Gutierrez@pima.gov	Tucson 12th Street Corridor Project	Practitioner
<b>C.J. Eisenbarth Hager</b> Vitalyst Health Foundation chager@vitalysthealth.org	Reinvent PHX, SCNTHIA, Coffelt, Shared-Use Roosevelt	Practitioner, advisory, supporter
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# Appendix 2: Interview Guide

1. Please explain what part you played in the HIA process.

2. Who was on your team? How did it work out?

*If they need probing, think about:*

- Any type of expertise (or specific people/organizations) you wish had been included?
- Any type of expertise that turned out to be unnecessary?
- What is the role of policymakers?
- Communication, differing terminology

3. What worked well for your HIA(s)? What (if anything) are you glad you chose to do?

*If they need probing, think about:*

- The team
- HIA steps
- HIA values
- Funding
- Timeline
- Logistics, flexibility of the process
- Outcomes
- Communication, politics
- Research methods

4. (a) What challenges (if any) did you encounter during the HIA process?

*If they need probing, think about:*

- The team
- HIA steps
- HIA values
- Funding
- Timeline
- Logistics, flexibility of the process
- Outcomes
- Communication, politics
- Research methods
- Limitations?

(b) For each challenge they mention, follow up with:

**I. How did you address the challenge? What solutions did you come up with?**

**II. Are there any ways that you wish you would have addressed the challenge(s) differently? Ideas that arose later on?**



**5. What do you think are the most important goals and outcomes of a HIA?**

*(a) If they were involved in conducting the HIA:*

**Overall, how do you think your HIA turned out?**

**What were the outcomes?**

*(Think about impact, influence, and leverage.)*

*(b) If they were an end user:*

**I. How (if at all) did the HIA(s) influence the decision makers (or you, if the person is a decision maker)?**

*If they need probing, think about:*

- If you persuaded others, how did you approach it and was that method effective?
- What (if anything) caused hesitation from you or other decision makers (was there opposition)?

**II. What (if any) other outcomes did the HIA(s) produce?**

*(Think about impact, influence, and leverage.)*

**III. What was most useful and convincing about the HIA process and report?**

*If they need probing, think about:*

- What (if any) additional information do you wish you had access to?

**6. How did the HIA process in practice compare with HIA steps and guidelines (the process in theory)?**

*If they need probing, think about:*

- Were the steps followed chronologically?
- Was each step fully executed?
- Were the steps useful/necessary?

**7. Do you think it's worthwhile for Arizona to continue conducting this many HIAs?**

**If so, what (if anything) is necessary to facilitate that?**

**8. Is there anything else that you think is important?**

**Any additional advice for future HIAs?**

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## Lessons Learned from Arizona: Promising Practices for Health Impact Assessments

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