

Executive Summary April 2016



















Project Funders

This project was supported by a grant from the Health Impact Project, a collaboration of the Robert Wood Johnson and The Pew Charitable Trusts, with funding from the de Beaumont Foundation. The opinions expressed are those of the authors and do not necessarily reflect the views of the Health Impact Project, Robert Wood Johnson Foundation, de Beaumont Foundation, or The Pew Charitable Trusts.

About this Executive Summary

This document provides a summary of the Shared-use Roosevelt Health Impact Assessment (SHUR), which took place from late 2014 through summer 2015. SHUR was conducted in order to better inform future decision-making and funding allocations related to the expansion of "shared-use", or the community-use of school district owned properties, within the Roosevelt Elementary School District in South Phoenix. The SHUR team also recognizes that many school districts and jurisdictions are exploring and undertaking similar decisions throughout the United States, and hopes that the results of this health impact assessment (HIA) are valuable to those entities as well.

Special Thanks

The authors would like to acknowledge the over 300 South Phoenix residents, neighbors, and community members that participated in this HIA through surveys, focus groups, key informant interviews, and community mapping sessions. The SHUR community advisory board, or Insight Committee, also deserves special recognition for their commitment throughout the entire HIA process –names and affiliations of the committee members can be found in the full report.

This HIA would not have been possible without our experienced, insightful, and thorough technical assistance providers: Amber Lenhart, the Health Impact Project, and Steve White and Emily Henke, Oregon Public Health Institute.



Background

A community's health is largely influenced by social factors such as education, economic opportunities, conditions of neighborhoods as well as access to healthy food, safe spaces to recreate, reliable transportation, and quality housing¹. (See figure below: Social Determinants of health). As rates of chronic disease continue to rise, geographic areas with higher rates of poverty and fewer resources tend to be most greatly affected. The Centers for Disease Control and Prevention, along with organizations such as the Robert Wood Johnson Foundation, are now stating that zip code is a better predictor of health than genetic code.²

A recent study led by Virginia Commonwealth University's Center on Society and Health revealed a fourteen year life expectancy gap between zip codes in the greater Phoenix area³. Due to inequities related to the aforementioned social factors, individuals born in north Scottsdale (85258) are living on average 85 years

Zip code is a better predictor of health than genetic code.

while those born just south of downtown Phoenix (85004) are only living 71 years. Efforts to reduce chronic disease and improve health equity must include targeted approaches to create and sustain political, social, and environmental conditions that support health.

A strategy termed shared-use, sometimes called joint-use, is spreading in communities throughout the United States. Shared-use is defined as "opening school buildings and grounds during non-school hours for community use"⁴. Through shared-use, schools can provide safe spaces to play and gather when other recreational spaces are lacking, unsafe, or in poor condition.

The Study Area

The Roosevelt Elementary School District (RSD) was founded in 1912. Its 21 schools serve over 12,000 students and 1,200 employees. Currently, although RSD is taking great strides in the right direction, after-hours use of RSD school properties by the community has been limited to agreements on a contractual or event-by-event basis. In order to expand access to District-owned properties to be used more regularly by the community, the District expressed interest in participating in a Health Impact Assessment (HIA) to help inform and improve future shared-use decision-making.

Social Determinants of Health



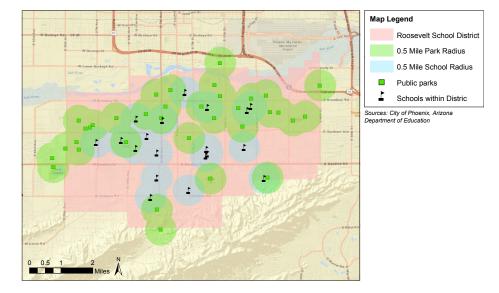
SHUR Project Goals

- Better understand the current health and well-being of the community that the Roosevelt School District serves
- Predict the impacts on the social determinants of health from shared-use of district properties
- Provide recommendations that help to expand and promote the community use of district-owned properties in the Roosevelt School District safely and responsibly
- Present data and information on shared-use that is useful for other districts locally and elsewhere



Shared Use Roosevelt HIA: Schools & Parks with a 0.5 Mile Radius

This map represents the City of Phoenix parks located within the SHUR study area boundaries. Literature indicates individuals are willing to walk 0.5 miles to spaces of recreation. Areas that remain pink have limited access to recreation. Areas in blue are potential spaces for recreation if shared-use is implemented.



Health Impact Assessment: A Community Driven Process

HIA is a tool that helps decision-makers consider the health effects of a proposed policy, project, plan, or program. Through the six steps of HIA [Screening, Scoping, Assessment, Recommendations, Reporting, Monitoring and Evaluation], direct and indirect impacts of a decision are assessed before the decision is

made in order to anticipate outcomes, both positive and negative, on the health of a community⁵. Equity is a core value of HIA. Therefore, HIA also addresses the reasons why low-income people, communities of color, and other underserved populations experience poorer health as a result of inequities in society⁶. Intentional community-involvement is involved at each step of HIA.

Data Snapshot

Existing conditions data, which consisted of demographics, deaths, and hospital discharge data, were used to examine the characteristics and health status of the community within the study area.

Demographics

The SHUR study area houses a younger and lower-income population as compared to the rest of Maricopa County. Median age in the study area was 29.5 years vs. 35.6 years in the county and 23.8% of residents live below the federal poverty level vs. 11.6% in the county. In addition, the study area has a larger Latino and African American population, resulting in a larger number of Spanish speaking residents as compared to the entire county (46.8% vs. 20.5%).

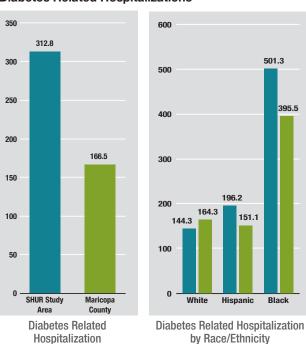
Therefore, HIA also addresses the reasons why low-income people, communities of color, and other underserved populations experience poorer health as a result of inequities in society.



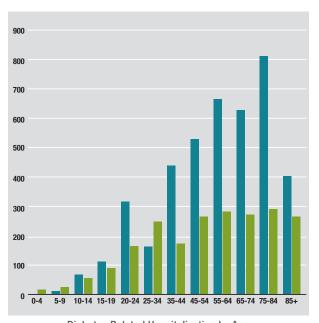
Health

There is definite cause for concern in the health status of the study area, especially related to diabetes, asthma, and obesity. This can be evidenced by data which reveal that deaths due to complications related to diabetes are 38% higher in the study area than in the rest of Maricopa County (32.9 per 100,000 vs.

Diabetes Related Hospitalizations

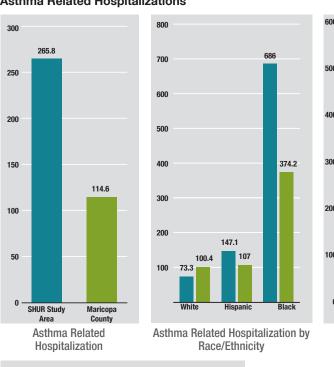


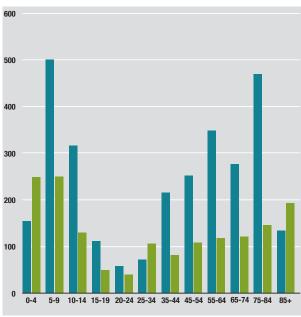
by Race/Ethnicity



Diabetes Related Hospitalization by Age

Asthma Related Hospitalizations





Asthma Related Hospitalization by Age

SHUR Study Area Maricopa County



23.8 per 100,000). Rates of both inpatient and emergency room hospitalizations related to diabetes as well as asthma in the SHUR study area are higher across almost all age groups from 5 to 84 years of age in comparison to the rest of Maricopa County - especially in Latino and African American Populations (see graphs above). In addition, hospitalizations that are obesity and heat related are also higher in the study area than in the rest of Maricopa County. These baseline data helped to inform the Insight Committee to develop innovative, effective, and sustainable solutions to address the social determinants of health such as: access to recreation, access to healthy food, economic development, affordable housing, and availability of quality education, all of which are large contributors to these disparities in health outcomes.

Methods

The Insight Committee

A community advisory group made up of representatives from local governmental, academic, and community-based organizations – the Insight Committee – provided leadership for the HIA. The Insight Committee was presented with the existing conditions data shortly after being convened for the first time. These data, along with the committee member's personal experiences and relationships with their communities, helped to guide the HIA process.



At the onset of the Scoping phase, through actively considering the social determinants on health, the Insight Committee found that the greatest health impacts of the policy decision to expand shared-use agreements in RSD came through five key pathways. The study's research questions and methods were built within these pathways.

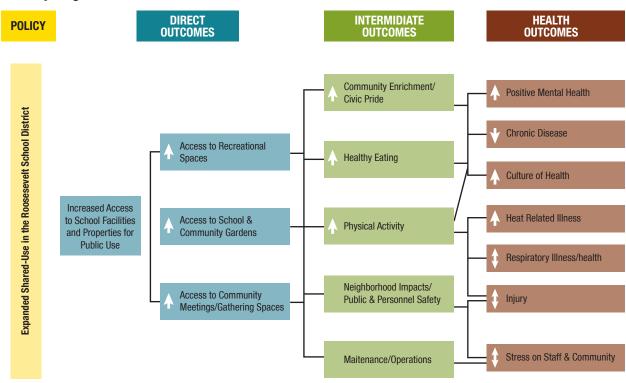
Pathways to Health				
1. Community Enrichment/Civic Pride	When communities gather together, they can increase their sense of social cohesion, belonging and trust – all of which have been shown to improve physical and mental health.			
2. Healthy Eating	District owned vacant lots, open spaces, and community kitchens can serve as spaces for both youth and adults to grow, prepare, and eat healthy foods.			
3. Physical Activity	When schools open up their recreation spaces to community members after hours, levels of physical activity with both youth and adults can increase, especially when facilities are in good order (e.g., clean, graffiti-free, and properly lit).			
4. Neighborhood Impacts and Public/ Personnel Safety	Improving safety and security must be priorities if school facilities are to be shared by the public. Amount of staffing/supervision, level of police presence, quality of lighting/infrastructure, and level of community interaction can all impact how safe people feel and crime rates.			
5. Maintenance/Operations	Common costs for share-used include, but are not limited to: maintenance, cleanup, repairs, staff, security, and utilities. However, costs can be reduced through greater ownership and involvement by the community.			



The Pathway Diagram

The purpose of developing the pathway diagram was to help present a clear visual of the ways in which the policy decision of expanded shared-use ultimately impact the health of students and community residents in the study area.

Pathway Diagram



The study's five pathways and associated research questions helped to guide the community engagement and assessment activities for the HIA. The assessment phase was broken down into two stages:

1) understanding the existing health conditions of the community (previously discussed) and 2) assessing the predicted health impacts of expanding shared-use.

A multi-method approach resulted in the collection and analyses of demographics data, hospital discharge data, and crime data, as well as extensive literature review. Data collection and analysis were performed by the Office of Epidemiology at the Maricopa County Department of Public Health (MCDPH) and literature review was performed by the Arizona State Southwest Interdisciplinary Research Center (ASU SIRC).

In total, over 300 individuals that live, work and/ or go to school in the study-area community were involved in the assessment processes.

Additionally, staff from the ASU SIRC worked with promotoras (community health workers) from Unlimited Potential Arizona and Southwest Behavioral Services to perform primary data collection in the community. This data collection included focus groups with youth and adults (25 individuals), community surveys (225 individuals), key informant interviews (19 individuals), and community mapping sessions (39 individuals). In total, over 300 individuals that live, work and/or go to school in the study-area community were involved in the assessment processes.



Findings

Assessment phase results showed that residents within the Roosevelt School District care deeply for their community and value expanded shared-use, particularly for the opportunities it might open up for increased activity and education among youth. Additionally, residents noted a desire and commitment toward improving their community for current and future generations. Although data may reveal discouraging disparities in health outcomes, the community members and those organizations that support them see many opportunities for the health of RSD residents to improve over time. The primary perceived benefits of expanding shared-use include: 1) the opportunity for community enrichment through collaboration/partnership and 2) physical activity improvement.

Shared-use might lead to "happier community members".

Community Enrichment

Through increased access to community gathering spaces as well as more open communication channels between the school district and the community, social cohesion in the community, sense of ownership for school properties, and partnerships based on accountability and trust can improve – all of which can increase the health of the community as well as help to address issues with safety and security. One key-informant noted that shared-use might lead to "happier community members".

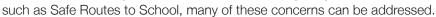
Physical Activity

Shared-use can also potentially improve physical activity in the RSD area by directly providing increased access to recreational spaces. In SHUR, this appeared to be especially true for youth rather than adults. Youth were more likely to state that they would take advantage of open schools, especially if they lived in neighborhoods where local parks were not close. A strong emphasis was placed on the need for organized and planned physical activities for local youth so that improvement in physical activity could be supported in a structured manner. There was also a desire for open indoor gyms to address issues such with excessive heat and pollution. For example, indoor gyms could be opened during high pollution advisory days or excessive heat warning days. One teacher advocated for open-use of gyms, stating, "If they had a gym available, the kids would be there every day."

Barriers/Concerns

Despite these two primary perceived benefits – Community Enrichment and Physical Activity - residents, leaders, and District personnel emphatically emphasized that a number of barriers, concerns, and needs must be addressed in order for expanded shared-use to be successfully implemented.

The most important considerations include those related to safety, security and crime. Again and again throughout the HIA process, community members expressed their concerns over the safety of the streets in their neighborhoods. Many community members avoided physical activity during the night time or around dangerous intersections. However, by enhancing safety protocols at the District and City levels, creating stronger partnerships with community organizations as well as law enforcement, enlisting volunteers, and implementing programs







Predicted Health-impacts of Expanded Shared-use

The purpose of this table is to predict the impacts on health within the context of each pathway and to serve as a summary for the assessment phase. Overall, according to the literature and data, expanded community use of District-owned properties will positively impact public health; however, special consideration must be placed on methods to mitigate respiratory illness, injury as well as stress on staff and the community moving forward.

Health Determinants and Outcomes	Likelihood	Quality of Evidence	Overall Public Health				
Pathway #1 Increase access to school facilities for public use Increased Community Enrichment/Civic Pride							
Positive Mental Health	A	••	+				
Chronic Disease	▼ ▼	••	+				
Culture of Health		•••	+				
Pathway #2 Increased access to school Facilities for public use Increased Healthy Eating							
Positive Mental Health	A	•	+				
Chronic Disease	▼	••	+				
Culture of Health	A A	•••	+				
Pathway #3 Increased access to school facilities for public use → Increased Physical Activity							
Heat Related Illness	▼	••	+				
Respiratory Illness/Health	A	••	-				
Chronic Disease	▼ ▼	•••	+				
Culture of Health	A A	•••	+				
Positive Mental Health	A	••	+				
Injury	A	••	-				
Pathway #4 Increased access to school facilities for public use → Neighborhood Impacts/Public Safety							
Injury	A	•	-				
Stress on Staff and Community	▼	••	+				
Pathway #5 Increased access to school facilities for public use → Maintenance/Operations							
Stress on Staff and Community	A	••	-				

LEGEND:

Likelihood

Direction of arrow indicates effect on condition:

- \blacktriangle or \blacktriangledown = Possible, more likely to happen than not.
- \blacktriangle or \blacktriangledown \blacktriangledown = Probable, very likely to happen.
- $\blacktriangle \blacktriangle$ or $\blacktriangledown \blacktriangledown \blacktriangledown =$ Definite, will happen.

Quality of Evidence

- = No direct evidence to support OR evidence is inconclusive.
- ullet = Direct evidence but from limited sources, including published studies.
- $\bullet \bullet \bullet =$ Direct strong evidence from a range of data sources collected using different methods.
- •••• = Overwhelming strong evidence from a range of data sources using different methods.

Overall Public Health Impact - positive (+) or negative (-).



Recommendations

In order to maximize the health benefits of expanded shared-use while mitigating the potential negative health outcomes, the SHUR IC worked to develop and prioritize a list of 21 recommendations to various responsible agencies and organizations. These recommendations were then "ground-truthed" through a final community focus group (11 community members). The top three recommendations for each pathway are presented below. The full list can be seen at www.livableaz.org.

Pathway to Health	Rec.	Recommendation	Agency(ies) Responsible
Community Enrichment/ Civic Pride	1.1	Hold community events and activities on school grounds in order to gather community members and foster increased social cohesion.	Roosevelt School District (RSD) Cooperative extension Girl Scouts City of Phoenix Parks and Rec/FIT PHX Southwest Behavioral Health MCDPH
	1.2	Gather an inventory of existing services and school or community-based activities. Advertise and promote services and activities through schools and community agencies.	City of Phoenix Parks and Recreation RSD Local media outlets
	1.3	Work with the City of Phoenix to improve street infrastructure around schools and parks in order to increase safe neighborhood gathering and community pride.	City of Phoenix Streets Transportation Dept. City of Phoenix Complete Streets Advisory Board APS/SRP
Healthy Eating	2.1	Implement school gardens that grow fruits and vegetables by engaging students, parents, and community members.	RSD International Rescue Committee Cultivate South Phoenix UofA Cooperative Extension
	2.2	Conduct and promote healthy cooking, nutrition and home gardening classes for families and community members.	RSD School with shared-use RSD Wellness Center/Brooks Community School University of Arizona Cooperative Extension Valley Permaculture Alliance
	2.3	Bring farmers' markets and pop-up stands to schools, community centers and parks in the study area. Create partnerships with local food retailers and farms.	Arizona Farmers' Market Association City of Phoenix Planning and Zoning International Rescue Committee Cultivate South Phoenix (CUSP) Tiger Mountain Foundation Maricopa County Food System Coalition
Physical Activity	3.1	Create Partnerships with community agencies to provide free or low-cost structured physical activity courses for youth and community members during shared-use/open-use periods	RSD FIT PHX City of Phoenix Parks and recreation Local running groups
	3.2	Implement shared-use that includes open gyms to accommodate individuals with health issues such as asthma and other respiratory illness.	RSD Community members – for volunteering/ supervision Block watch groups Asthma Coalitions



	3.3	Conduct physical assessments of schools (visual observation of space, lighting, shade etc.) in order to identify best candidates for shared-use that are safe and accessible to the community.	MCDPH ASU Planning
Neighborhood Impacts/ Public Safety	4.1	Ensure facilities considered for shared-use are assessed for safety. Considerations may include: access to the school, pedestrian/bicyclist safety, playground equipment, congestion/parking, gangs and lighting.	RSD PTOs MCDPH City of Phoenix Streets Transportation
	4.2	Develop policies that are safety minded related to supervision, trash, dogs, hours. Assess how supervision might impact stress on staff (custodians, teachers, security).	RSD
	4.3	Create or enhance neighborhood block watch groups that are able to supervise open facilities during non-school hours.	RSD Phoenix Police Phoenix Neighborhood Services
Maintenance/ Operations	5.1	Estimate costs of shared-use activities. Identify funding sources (existing and potential) for shared-use related costs.	RSD City of Phoenix
	5.2	Establish shared-use funding committee with PTOs and community members.	RSD City of Phoenix PTOs Community Development Corporations Local Businesses, foundations, organizations Non-profit hospitals
	5.3	Create a communication channel within the District to distribute information related to shared-use and to enlist volunteers (parents, current staff).	RSD

Conclusion

Overall, according to the literature and data, expanded community use of District-owned properties will positively impact public health in the community – especially through increased community enrichment, social cohesion, and physical activity. In addition, Current efforts by groups such as the TigerMountain Foundation, the Orchard Community Learning Center, Cultivate South Phoenix and the District itself point to the fact that healthy eating can also be improved in the community through creative use of land, interactive community garden development, and nutrition education. Nevertheless, special consideration must be placed on appropriate methods to mitigate safety concerns, bicyclist and pedestrian injuries, as well as added stress on RSD staff moving forward.

The study's 21 recommendations, if implemented, can be a starting point for RSD, MCDPH and many community partners to begin implementing better policy, developing better supportive programming, fostering better collaborative efforts, and most importantly, better working alongside populations facing health inequities to improve the health and wellbeing of the community.

If you are interested in learning more about how to support implementation of the SHUR recommendations, feel free to reach out to Kenneth Steel – kennethsteel@mail.maricopa.gov. To learn more about Health Impact Assessment in Arizona, please visit the Arizona Alliance for Livable Communities website: www.livableaz.org.



While most tend to equate shared-use with playgrounds, shared-use can also include the creative reuse of vacant land. After signing a lease with the Roosevelt School District to occupy an 18 acre plot of land, Cultivate South Phoenix has helped jump-start Spaces of Opportunity, a community-based initiative to refashion the food system in south Phoenix and to promote healthy food access, healthy literacy, and economic development.

More info at: http://cultivatephx.com/

Citations

- 1 World Health Organization, Commission on Social Determinants of Health, Closing the Gap in a Generation: health Equity Through Action on the Social Determinants of Health 2008.
- 2 Arkin, E., Braveman, P., Egerter, S., & Williams, D. (2014). Time to act: Investing in the health of our children and communities. Princeton, NJ: Robert Wood Johnson Foundation Commission to Build a Healthier America
- 3 Virginia Commonwealth University Center on Society and Health, 2014. Updated 04/05/2016
- 4 Young, D. R., Spengler, J. O., Frost, N., Evenson, K. R., Vincent, J. M., & Whitsel, L. (2014). Promoting physical activity through the shared use of school recreational spaces: a policy statement from the American Heart Association. American Journal of Public Health, 104(9), 1583-1588.
- 5 National Research Council (US) Committee on Health Impact Assessment. (2011). Improving health in the United States: The role of health impact assessment. National Academies Press (US).
- 6 Heller, J., Givens, M. L., Yuen, T. K., Gould, S., Jandu, M. B., Bourcier, E., & Choi, T. (2014). Advancing efforts to achieve health equity: Equity metrics for Health Impact Assessment practice. International journal of environmental research and public health, 11(11), 11054-11064.







