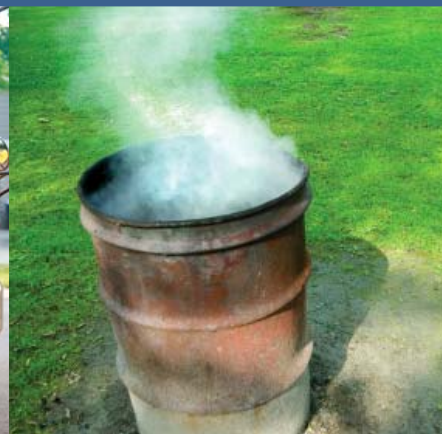




HIAWATHA CARE PROJECT RISK RANKING REPORT

December 2012



ACKNOWLEDGEMENTS

Project Partners

Alexander's Import Auto Repair ♦ American Lung Association of Minnesota ♦ Blue Construction ♦ City of Minneapolis ♦ East Phillips Improvement Coalition ♦ Environmental Justice Advocates of Minnesota ♦ Gardening Matters ♦ Hennepin County ♦ Hennepin–University Partnership ♦ Little Earth of United Tribes ♦ Longfellow Business Association ♦ Longfellow Community Council ♦ Longfellow Lutheran parishes / Minnehaha Communion ♦ Minnehaha Creek Watershed District ♦ Minnesota Department of Health ♦ Minnesota Pollution Control Agency ♦ Mississippi Watershed Management Organization ♦ St. James AME Church ♦ US Environmental Protection Agency ♦ Women's Environmental Institute

Photos

Hennepin County ♦ US EPA ♦ Minnehaha Creek Watershed District ♦ US EPA
Hennepin County ♦ US EPA ♦ Minnesota Pollution Control Agency ♦ Hennepin County ♦ US Department of Agriculture ♦ US EPA

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Introduction

Throughout summer and fall 2011, the Hiawatha CARE Project team talked to over 700 residents who live, work, visit, and worship in East Phillips and western Longfellow about environmental health risks in their communities. People talked about the air they breathe, the water they drink, and the food they eat. They mentioned household concerns – including lead, mold, pests, and toxics — as well as global concerns related to environmental sustainability and the economic crisis. Others focused on health issues such as asthma, obesity, and access to health care.

Overall, community members identified more than 150 issues, which were categorized into 20 risks to be included in the risk ranking process. Fact sheets were developed for these 20 issues, as well as a matrix that identified environmental and health issues associated with each issue (the matrix was translated into Spanish and Somali).

Risk Ranking Overview

The Risk Ranking process was a community-oriented process to identify which of the 20 risks have the greatest impact on environmental health in East Phillips and Longfellow. The objective of the risk ranking process was to narrow down the list of risks to facilitate prioritization and identification of the risks that the community would like to address through the CARE process.

The Risk Ranking process began in summer 2012 and included several techniques. These techniques aimed to provide the broadest opportunity for people to participate; to reach the economically, socially, and demographically diverse population in the area; and to reach people at a variety of venues. The four techniques used for Risk Ranking included:

1. CEW evaluation:

The project's Community Environmental Workgroup or steering committee evaluated the community-identified risks on three weighted factors: environmental impacts (45%), health impacts (45%), and economic impacts (10%). The CEW provided the perspective of issue experts and engaged community organizations.

Advantage: Informed group of people who have been engaged in project.

Challenge: Many do not live in project area.

2. Community Focus Groups

The project team sponsored five community focus groups to talk to area residents about the community environmental health risks. The focus groups included information on the risks, a risk ranking activity, and a discussion of the risks.

Advantage: Opportunity to engage people deeply on the environmental health risks and to understand the root of their concerns. Chance to build off the synergies created through group discussion.

Challenge: High cost-per-participant / very difficult to get people to commit one hour of their time.

3. Door-to-Door Canvassing

The project team randomly choose residences throughout East Phillips and western Longfellow to talk to people about environmental health risks and to ask them to complete the risk ranking assessment.

Advantage: Go to where the people are – opportunity to talk one-on-one about risks.

Challenge: Time needed to do one-on-one engagement.

4. Community Event Dot Voting

The project team tabled at several events in the project area. The information tables included project poster board, project information, risk information, and a “risk voting board” where people were asked to put dots next to the four issues that they felt had the greatest impact on health and environment in the community

Advantage: Higher turnout – reach broader, more diverse audience. Low cost / little preparation needed.

Challenge: Less opportunity to talk in depth about risks. Respondents may not be from target area.

CEW Risk Ranking

The Community Environmental Workgroup did an individual risk ranking exercise of 24 risks using three criteria:

- Health Impact: includes considerations such as prevalence of risk, frequency of exposure, seriousness of exposure, etc.;
- Environmental Impact: includes impacts on natural resources and ecosystems; and,
- Economic / Financial Impact: includes impact on the local economy and household finances.

Each criterion was rated on a 1-to-5 scale in terms of the impact that each risk had, where:

- 1 = very low impact
- 2 = low impact
- 3 = medium impact
- 4 = high impact
- 5 = very high impact

The CEW members' ratings were aggregated and an average calculated (see Figure 1). Overall, as noted in the second column, air pollution and vehicular pollution rated as having the highest impacts. Energy consumption, environmental sustainability, and food access and security rounded out the top five risks.

The third column lists the average rating based on the environmental criterion. Note that energy, environmental sustainability, vehicular pollution, and water quality rated highest in terms of environmental impact. The fourth column identifies the average rating by CEW members based on the health criterion. Asthma, nutrition and obesity, health disparities, and air pollution rated higher on this dimension.

Based on the CEW's Risk Ranking exercise, the group decided to eliminate the bottom four issues from future evaluation. Community blight and empty storefronts were folded in under economic instability. Lack of community and crime could be issues addressed as part of the Hiawatha CARE project, but those issues were determined to be beyond the scope of an environmental health project.

Figure 1: CEW Member Risk Ranking

Issue	Average Rating	Environ Rating	Health Rating
Air pollution	4.04	3.82	4.47
Pollution from vehicles, traffic	3.99	4.06	4.12
Energy consumption	3.71	4.29	3.12
Environmental sustainability	3.56	4.24	2.88
Food access and security	3.52	2.82	4.24
Lead	3.49	2.88	4.29
Soil contamination	3.47	3.71	3.47
Toxics in the home	3.41	3.18	3.82
Nutrition and obesity	3.31	2.00	4.59
Asthma	3.28	2.06	4.59
Water quality	3.26	4.00	2.65
Trash	3.23	3.82	2.65
Lack of green, open space	3.18	3.35	3.12
Health disparities	3.16	1.65	4.53
Second-hand smoke	3.13	2.38	4.00
Economic instability	3.08	2.12	3.71
Mold	3.06	2.29	3.94
Unfriendly bike/ped environ.	3.04	2.88	3.24
Radon	2.68	2.00	3.53
Bugs and pests	2.63	2.25	3.06
Community blight	2.53	2.76	2.00
Crime and personal security	2.49	1.71	3.00
Lack of community	2.29	2.00	2.53
Empty stores, business vitality	2.07	2.07	1.53

Focus Groups

The project team held five focus groups as part of an informed Risk Ranking process. The team set up two focus groups with residents in western Longfellow, one focus group with residents in East Phillips, one focus group with Somali youth, and one focus group at a meeting at Little Earth of United Tribes. Thirty-four people attended the groups.

Figure 2: Focus Group Risk Ranking

Issue	Average Rating
Air pollution	4.29
Economic instability	4.09
Pollution from vehicles	3.99
Nutrition and obesity	3.99
Health disparities	3.84
Unsafe bike/walk env.	3.74
Water quality	3.71
Lead	3.71
Asthma	3.71
Trash	3.70
Energy consumption	3.70
Second hand smoke	3.66
Environmental sustain.	3.66
Access to healthy food	3.63
Bugs and pests	3.57
Soil contamination	3.54
Mold	3.53
Lack of green space	3.44
Radon	3.37
Toxics in the home	3.29

The project team recruited attendees via project email list, mail, door knocking, and word of mouth. Dinner was provided at all meetings. Childcare was available at three meetings and translation was available upon request.

The groups were designed to include a description of each community-identified risk, the environmental impacts associated with that risk, and the health impacts associated with that risk. Each attendee rated each risk on a 1-to-5 scale that was similar to the scale used by the CEW. After the risk ranking process, the project team facilitated a group discussion to gain deeper understanding of how these risks impacted residents on a personal level.

The result of these groups, depicted in Figure 2, shows air pollution and economic instability as the highest rated risks. Nutrition and obesity, vehicular pollution, and health disparities follow. Figure 3 shows notable variation between the two neighborhoods. In both neighborhoods, air

pollution and economic instability rank highly. East Phillips residents also rank nutrition and obesity, second hand smoke, and asthma in the top 5 issues, while Longfellow residents rank water quality, vehicle pollution, and unsafe bike/walk environment their top 5 concerns.

Door-to-Door Risk Ranking

To get a broader representation of people in the communities, the CARE project team went door-to-door to talk to people about environmental

Figure 3: Focus Group Rating by Neighborhood

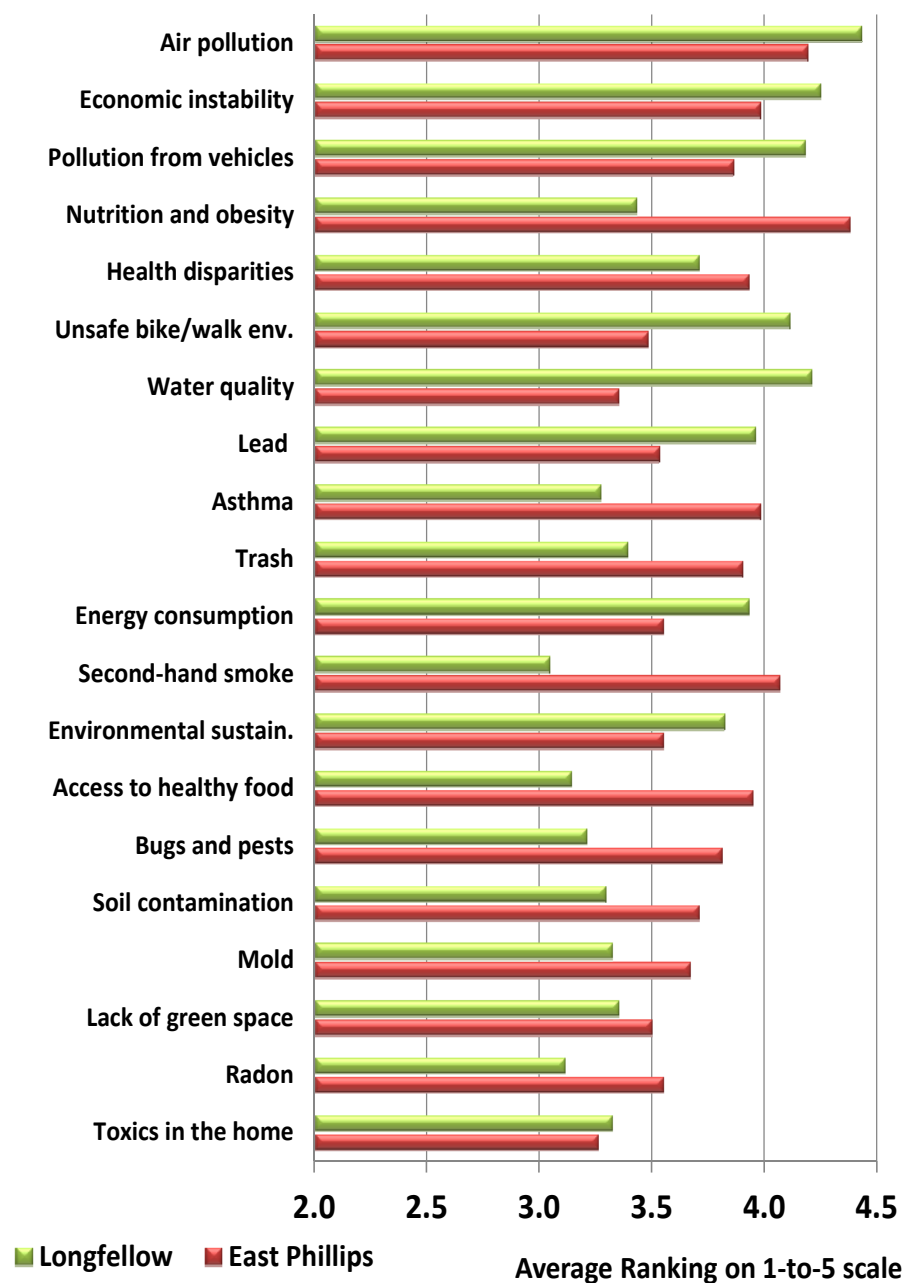


Figure 4: Door-to-Door Risk Ranking

Issue	Average Rating
Nutrition and obesity	3.93
Economic instability	3.85
Pollution from vehicles	3.72
Air pollution	3.68
Environmental sustain.	3.63
Health disparities	3.52
Asthma	3.38
Access to healthy food	3.32
Bugs and pests	3.29
Energy consumption	3.24
Lead	3.18
Soil contamination	3.18
Trash	3.18
Second-hand smoke	3.10
Lack of green space	2.92
Mold	2.92
Water quality	2.92
Unsafe biking/walk env.	2.87
Toxics in the home	2.74
Radon	2.25

health concerns and to involve them in the Risk Ranking process. The team talked with 60 people in the corridor (21 in Longfellow and 39 in East Phillips); an incentive was provided for their participation. The population was ethnically diverse, included both renters and homeowners, included generally lower-income households, and had many households with children.

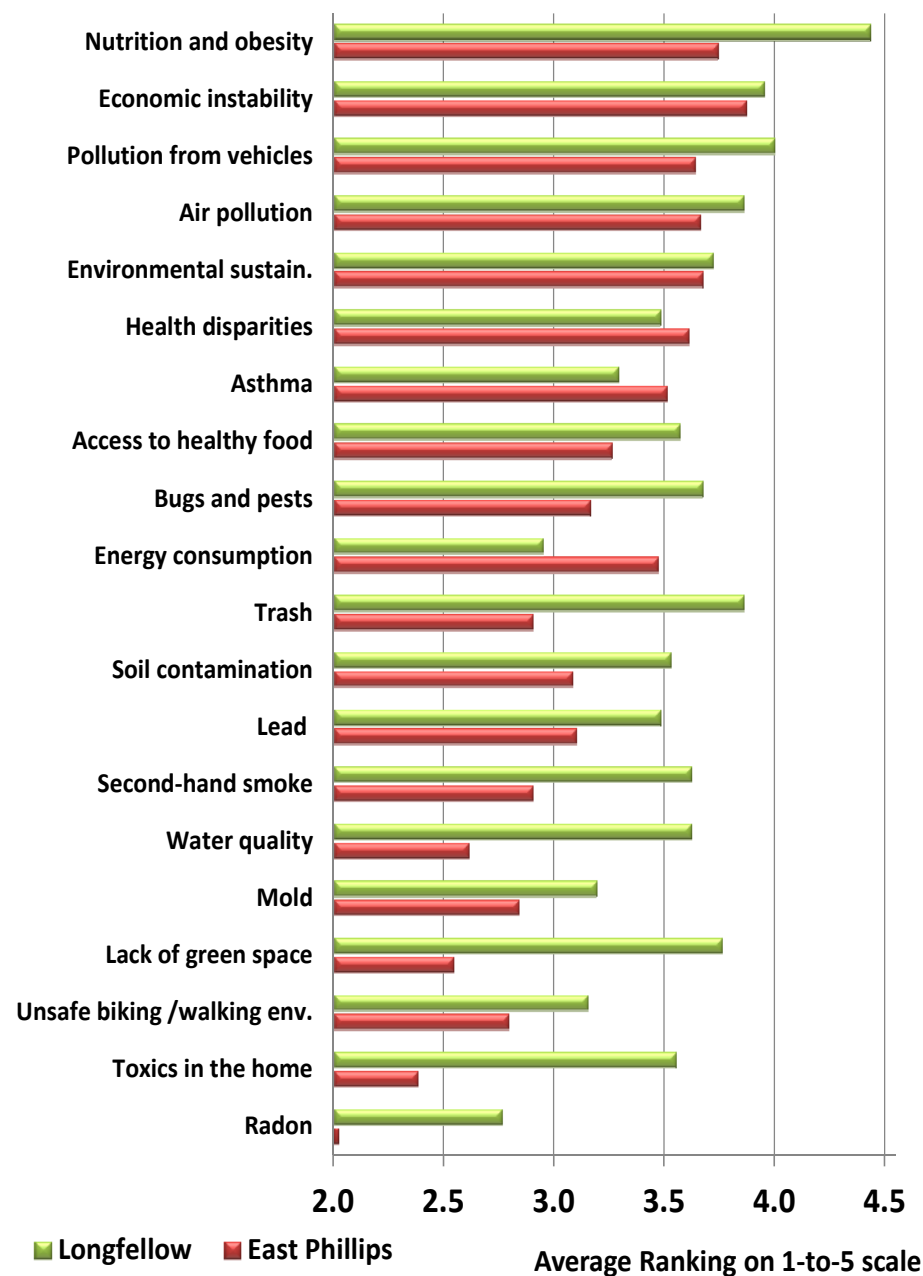
The community members ranked each risk on the same 1-to-5 scale, identifying the impact that each issue had on the environment and health in the community. Project team members also talked to the community members to get a better understanding of the reasons for their choices.

Among all respondents, nutrition and obesity and economic instability rated highest (see Figure 4). Vehicular pollution, air pollution, and environmental sustainability followed. Figure 5 shows responses by neighborhood. In East Phillips, the top 5 issues were the same as

the entire corridor, although the order was different. In Longfellow, the highest rated were similar, although trash replaced environmental sustainability in the top 5.

On the other hand, radon, toxics in the home, lack of open space, and water quality rated lowest in East Phillips. In Longfellow, radon, energy, unsafe bike / pedestrian environment, and mold rated lowest.

Figure 5: Door-to-Door Rating by Neighborhood



Community Events Dot-Voting Exercise

In addition to the targeted focus groups and door-to-door efforts, the project team attended several corridor-area events to reach out to the broader community and to raise visibility of the project. The project asked people to participate in a dot-voting exercise - an informal ranking process where people used sticky dots to vote for the highest priority risks. The events attended included:

- Longfellow Cornfeed - community festival
- Midtown Farmers' Market
- Minnehaha Communion community dinner
- East Phillips Clean Sweep - clean up and community event
- St Paul's Church Taste of Phillips Festival - community art event
- Latino Heritage Month event
- Longfellow Community Council Annual Meeting - community event and dinner
- Homegrown Minneapolis Open House - community event and light dinner.

At the events, the project team had a table with information on the Hiawatha CARE project, including a project display board. The table included a 24 inch by 36 inch poster board with a list and photos of the 20 community-identified issues. Each person was given four dots and asked to put dots next to the four issues that they felt had the greatest impact on the health and environment of the community. Participants were given a small treat for voting.

About 300 persons participated in the various events. Overall, event participants were a very diverse population and had a wide variety of concerns. Results varied notably by event, and votes often aligned with the purpose of the event. For example, trash rated highly at the Clean Sweep event and nutrition ranked highly at the Farmers' Market. Other issues were surprising in their neighborhood variation: asthma rated very highly in the Phillips events, but was rarely mentioned in Longfellow; economic instability rated highest in Longfellow events, but was more middling in its responses in Phillips.

Figure 6 shows overall totals for the events. Economic instability, nutrition

Figure 6: Event Votes

Issue	Total Votes	Longfellow Votes	Phillips Votes	Farm Mkt Votes
Economic instability	122	59	28	35
Nutrition and obesity	116	46	43	27
Health disparities	111	44	41	26
Lack of access to healthy food	108	42	52	14
Water quality	95	43	31	21
Air pollution	84	32	35	17
Environmental sustainability	73	32	19	22
Pollution from vehicles, traffic	66	28	19	19
Trash	65	23	31	11
Unsafe bike/ped environment	65	31	22	12
Asthma	57	7	49	1
Lack of green, open space	45	14	20	11
Second-hand smoke	33	15	16	2
Bugs and pests	31	9	19	3
Soil contamination	29	11	9	9
Energy	28	12	7	9
Lead	22	8	11	3
Mold	22	14	6	2
Toxics in the home	18	12	3	3
Radon	11	7	1	3

and obesity, health disparities, and access to healthy affordable food were most mentioned items at the events. In the Phillips events, access to healthy food, asthma, nutrition and obesity, and health disparities received the most votes, while in Longfellow economic instability, nutrition and obesity, health disparities, water quality, and access to health food received the most votes. The Farmers Market (which is located between the two neighborhoods) attendees rated economic instability, nutrition and obesity, and health disparities highest.

Overall Risk Ranking Results

The results of the various risk ranking efforts were aggregated to develop a ranking of the risks from 1 to 20. Figure 7 provides the rank order for the risks overall, and by each of the neighborhoods. For the overall rating, four factors were weighted such that focus group results equaled 40 percent of the total, the door-to-door ratings equaled 40 percent, events equaled 10 percent, and CEW ratings equaled 10 percent of the total. For each neighborhood, three factors were used so that the focus group results equaled 50 percent, door-to-door 45 percent, and events 5 percent of the total score.

Overall, nutrition and obesity, air pollution, and economic instability had the overall highest ratings -- all rated around 4.0 on a 5-point scale. These issues were also high concerns in both neighborhoods, with nutrition and obesity and air pollution rating highest in East Phillips and air pollution and economic instability rating highest in Longfellow.

Vehicular pollution and health disparities complete the top 5 overall issues, followed by access to healthy food and environmental sustainability. Overall, there was a surprising amount of consistency in highest rated risks across the two neighborhoods -- except for two notable exceptions. Asthma was the fourth

Figure 7: Overall Risk Ranking Results (Risks Ranked from 1 to 20)

	Overall Rating (1 to 5 scale)		East Phillips Rating (1 to 5 scale)		Longfellow Rating (1 to 5 scale)	
1	Nutrition and obesity	4.00	Nutrition and obesity	4.10	Air pollution	4.13
2	Air pollution	3.99	Air pollution	3.92	Economic instability	4.13
3	Economic instability	3.98	Health disparities	3.86	Pollution from vehicles	4.02
4	Pollution from vehicles	3.78	Asthma	3.82	Water quality	3.96
5	Health disparities	3.76	Economic instability	3.80	Nutrition and obesity	3.94
6	Access to healthy food	3.63	Access to healthy food	3.67	Environmental sustainability	3.76
7	Environmental sustainability	3.57	Pollution from vehicles	3.64	Health disparities	3.65
8	Asthma	3.47	Trash	3.50	Unsafe bike/walk environment	3.65
9	Water quality	3.38	Environmental sustainability	3.43	Lead	3.58
10	Trash	3.38	Second-hand smoke	3.42	Trash	3.56
11	Energy consumption	3.35	Bugs and pests	3.40	Lack of green space	3.44
12	Unsafe bike/walk environment	3.25	Energy consumption	3.36	Access to healthy food	3.41
13	Soil contamination	3.24	Lead	3.27	Energy consumption	3.37
14	Second-hand smoke	3.22	Soil contamination	3.24	Second-hand smoke	3.23
15	Lead	3.21	Unsafe bike/walk environment	3.14	Toxics in the home	3.34
16	Bugs and pests	3.21	Water quality	3.12	Soil contamination	3.31
17	Lack of green space	3.06	Mold	3.03	Bugs and pests	3.29
18	Mold	2.98	Lack of green space	3.02	Mold	3.18
19	Toxics in the home	2.85	Toxics in the home	2.73	Asthma	3.14
20	Radon	2.61	Radon	2.71	Radon	2.83

highest concern in East Phillips, but rated 19th in Longfellow. Conversely, water quality rated fourth in Longfellow, but was 16th in East Phillips.

Next Steps

The Risk Ranking process has resulted in six issues to be put forward for the prioritization process: nutrition and obesity, air pollution/vehicle pollution, eco-

conomic instability, health disparities, asthma, and water quality. The CARE project team and CEW will be working with community members to develop an action plan to address those risks which will identify any existing resources/programs that could address those risks and new programs, demonstration projects, or other opportunities to address those risks. This process will occur through winter / spring 2013.