# Appendix B: questionnaire for sighted collaborative participants

On to the survey! You have two maps and a map key. The map key applies to both maps. One map is labelled "reference map" and the other one is labelled "flood map". They both represent the same place, but one of them shows the extent of potential floods in the area. There are two types of flood zones: high probability and low probability. High probability floods are more frequent, but not very powerful. As a result, high probability flood zones cover less area and the buildings inside them will experience less damage. Low probability floods are less frequent but more powerful. Low probability flood zones are larger and buildings inside them will experience more damage. Low probability floods always happen in the places where high probability floods happen, but spread to additional places as well. Try remembering it this way: high probability, low damage. Low probability, high damage.

End of Block: Introduction

Start of Block: Demographics

Please enter your first and last name:

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What is your gender?

* Please specify: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
* Prefer not to say

What is your age?

* 18-24 years old
* 25-34 years old
* 35-44 years old
* 45-54 years old
* 55-64 years old
* 65-74 years old
* 75 years or older

Please describe your education:

* Some high school
* High school graduate or equivalent
* Some college
* Associates degree
* Bachelor’s degree
* Graduate or professional degree

Have you spent time with someone who is blind or severely visually impaired?

* No, or only in passing
* Yes, but a limited amount (partners on a short project)
* Yes, a fair amount (casual friends, coworkers)
* Yes, a significant amount (family, close friends)

How confident do you feel while using maps?

* Not confident at all
* Slightly confident
* Somewhat confident
* Mostly confident
* Extremely confident

Have you ever participated in hazard mitigation planning for your community, or any other type of community emergency planning?

* No
* No, but I familiarized myself with the plan after it was completed
* Yes, but only in a limited capacity
* Yes, in a significant capacity

In the bottom-right corner of your maps, you will find a shape. Your reference map will have one shape, and your flood map will have a different shape. Please select the pair of shapes that you find on your maps:

* Star and triangle
* Circle and square

End of Block: Demographics

Start of Block: Reference map reading

Take a minute to familiarize yourself with the REFERENCE map. This is the map that shows only roads, buildings, and a river. The shape in the bottom-right corner is either a star or a circle. This section should be completed without your partner.

End of Block: Reference map reading

Start of Block: Reference map tasks

How many buildings appear to be represented on the reference map?

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Using the reference map scale bar as a reference, what is the approximate length (east-west distance) of the area being represented by this map?

* 128 feet
* 800 feet
* 1,250 feet
* 5 miles

Which quadrant of the reference map has the lowest building density (very few buildings far away from each other)?

* Northeast
* Northwest
* Southeast
* Southwest

End of Block: Reference map tasks

Start of Block: Flood map reading

Take a minute to familiarize yourself with the FLOOD map. This is the map that shows roads, buildings, a river, and flood zones. The shape at the bottom-right is either a square or triangle. This section should be completed without your partner.

End of Block: Flood map reading

Start of Block: Flood map tasks

Roughly how much space on the flood map do the flood zones occupy?

* Less than one quarter
* More than one quarter but less than one half
* More than one half but definitely not the whole map
* All or nearly all of the map

Roughly how much of the entire flood area is a high probability flood zone?

* Less than one quarter
* More than one quarter but less than one half
* More than one half but definitely not the whole map
* All or nearly all of the flood zone

End of Block: Flood map tasks

Start of Block: Assess your findings

The next section should be completed with your partner. If they have not reached this point, wait for them before proceeding. You will be asked to assess what you learned with the map and assess the community's vulnerability to flooding. For each question, discuss your thoughts with your partner until you agree on a response. Both you and your partner will then have similar responses to the questions in the next section.

End of Block: Assess your findings

Start of Block: Assessment tasks

With your partner, determine roughly what proportion of the total number of buildings are overlapped by flood zones:

* Less than one quarter
* More than one quarter but less than one half
* More than one half but definitely not the whole map
* All or nearly all of the buildings

With your partner, rank each map quadrant (northeast, northwest, southeast, southwest) according to how much flood damage you expect them to sustain in the future.

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Considering the previous question, briefly explain your highest and lowest ranking choice. Discuss with your partner and decide on a response together.

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Which map quadrant would be best for establishing a meeting point in case of a flood?

* Northeast
* Northwest
* Southeast
* Southwest

Are there areas or features represented in this map that would be important to blind people or people with low vision? Discuss with your partner and decide on a response together.

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Considering what you know from the map, what steps do you think the community could take to account specifically for blind people or people with low vision? Discuss with your partner and decide on a response together.

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End of Block: Assessment tasks

Start of Block: Summarize your findings

Reflect on what you have learned about the community. Based on your findings, write a short statement (1-3 sentences) that summarizes what you believe needs to be addressed in this community in order to build resilience against flooding. Discuss with your partner and decide on a response together.

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End of Block: Summarize your findings

Start of Block: End of collaboration

The collaborative portion is now over. Please notify Harrison when you've reached this point, then you may hang up the phone and complete the rest of the survey on your own.

End of Block: End of collaboration

Start of Block: Post-interpretation survey

How confident did you feel while using the two maps to complete tasks?

* Not confident at all
* Slightly confident
* Somewhat confident
* Mostly confident
* Extremely confident

How confident are you that the maps helped you to understand flood risk in the mapped community?

* Not confident at all
* Slightly confident
* Somewhat confident
* Mostly confident
* Extremely confident

How confident did you feel while learning the arrangement and layout of the maps?

* Not confident at all
* Slightly confident
* Somewhat confident
* Mostly confident
* Extremely confident

How confident did you feel while learning the meanings of symbols on the maps?

* Not confident at all
* Slightly confident
* Somewhat confident
* Mostly confident
* Extremely confident

How confident did you feel while using the maps to analyze flood risk?

* Not confident at all
* Slightly confident
* Somewhat confident
* Mostly confident
* Extremely confident

How confident would you be in using similar maps to analyze flood risk in your own community?

* Not confident at all
* Slightly confident
* Somewhat confident
* Mostly confident
* Extremely confident

How confident were you in answering questions knowing that your partner was using tactile versions of your maps?

* Not confident at all
* Slightly confident
* Somewhat confident
* Mostly confident
* Extremely confident

Considering the specific tasks that you performed, would you have preferred to complete them with a sighted partner, with a blind partner, with any partner, or without a partner?

* With a sighted partner
* With a blind partner
* With any partner
* Without a partner

End of survey.