

# The [System Name] Survey

This survey is part of the [system name] research. The purpose is to study how people use, share, and think about the [system name]. The information will help develop similar systems for supporting environmental justice. The survey is completely **anonymous** and is expected to take less than 30 minutes.

*Please answer each question carefully and to the best of your ability. Thank you!*

## **Before you knew the [system name]**

1. Please select the answer that shows how you feel about the statement.  
(Answer this question based on the time **before** you knew the [system name])

|   | Strongly agree        | Agree                 | Neither agree or disagree | Disagree              | Strongly disagree     |
|---|-----------------------|-----------------------|---------------------------|-----------------------|-----------------------|
| I was concerned about air quality.  | <input type="radio"/> | <input type="radio"/> | <input type="radio"/>     | <input type="radio"/> | <input type="radio"/> |
| My involvement with ACCAN's actions was active.   | <input type="radio"/> | <input type="radio"/> | <input type="radio"/>     | <input type="radio"/> | <input type="radio"/> |
| I was confident when I discussed air quality issues with other people.                      | <input type="radio"/> | <input type="radio"/> | <input type="radio"/>     | <input type="radio"/> | <input type="radio"/> |
| I felt my actions were influential in improving the local air quality with ACCAN.           | <input type="radio"/> | <input type="radio"/> | <input type="radio"/>     | <input type="radio"/> | <input type="radio"/> |
| I was comfortable with local air quality.   | <input type="radio"/> | <input type="radio"/> | <input type="radio"/>     | <input type="radio"/> | <input type="radio"/> |
| I was confident that I and ACCAN could achieve the goal of improving the local air quality. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/>     | <input type="radio"/> | <input type="radio"/> |

## **After you knew the [system name]**

2. Please select the answer that shows how you feel about the statement.  
(Answer this question based on the time **after** you knew the [system name])

|   | Strongly agree        | Agree                 | Neither agree or disagree | Disagree              | Strongly disagree     |
|---|-----------------------|-----------------------|---------------------------|-----------------------|-----------------------|
| I was concerned about air quality.  | <input type="radio"/> | <input type="radio"/> | <input type="radio"/>     | <input type="radio"/> | <input type="radio"/> |
| My involvement with ACCAN's actions was active.   | <input type="radio"/> | <input type="radio"/> | <input type="radio"/>     | <input type="radio"/> | <input type="radio"/> |
| I was confident when I discussed air quality issues with other people.                      | <input type="radio"/> | <input type="radio"/> | <input type="radio"/>     | <input type="radio"/> | <input type="radio"/> |
| I felt my actions were influential in improving the local air quality with ACCAN.           | <input type="radio"/> | <input type="radio"/> | <input type="radio"/>     | <input type="radio"/> | <input type="radio"/> |
| I was comfortable with local air quality.   | <input type="radio"/> | <input type="radio"/> | <input type="radio"/>     | <input type="radio"/> | <input type="radio"/> |
| I was confident that I and ACCAN could achieve the goal of improving the local air quality. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/>     | <input type="radio"/> | <input type="radio"/> |

3. About how many people did you discuss the [system name] with?

4. About how many times did you go to the monthly ACCAN meetings in 2015?

5. Did you **visit** or **use** the [system name]?

- Yes
- No [Skip question 4 and 5]

6. How did you **explore** data on the [system name]?

(Ignore this question if you did not explore data.)

[Please select all answers that apply]

- I clicked on the video playback button to watch the video
- I zoomed in and out of the video
- I used the line charts showing air quality data
- I clicked on the fast-forwarding button to jump to smoke emissions
- I browsed the images produced by the automatic smoke detection tool

Other (please specify)

7. How did you **document** data on the [system name]?

(Ignore this question if you did not document data.)

[Please select all answers that apply]

- I found smoke in the video and used the thumbnail tool to generate images. Then I collected these smoke images in a document (e.g. Google Doc, Microsoft Word)
- I selected the images produced by the automatic smoke detection tool. Then I collected these smoke images in a document (e.g. Google Doc, Microsoft Word)
- I wrote stories on online platforms (e.g. Facebook, Twitter, and Post-Gazette), and these stories referred to the [system name].

Other (please specify)

8. How did you **share** data via email or online platforms?  
(Data include images, web links, stories, etc. Online platforms include Facebook, Twitter, Post-Gazette, etc. Ignore this question if you did not share data.)

[Please select all answers that apply]

- I shared smoke images produced on the [system name]
- I shared screenshots of the [system name]
- I shared web links to the [system name]
- I shared stories which refer to the [system name]

Other (please specify)

9. If you **shared** data, what were your **motivations**?

(Ignore this question if you did not share data.)

[Please select all answers that apply]

- I thought that the data is valuable. I shared to make people aware of air quality issues.
- I shared to show that I care about air quality problems
- I shared to stay close to people who also care about air quality problems
- I shared to get feedback from others. This made me feel I was a part of the community
- I shared to spread the word about the [system name]

Other (please specify)

10. How often did you browse the [system name] after you noted smoke or bad smells? (E.g. look for evidence, check smell reports)

Every time

Almost every time

Sometimes

Almost never

Never

11. The [system name] shows and records air quality data. How likely do you think that browsing the [system name] makes people care about air quality problems?

Extremely likely

Likely

Neither likely nor  
unlikely

Unlikely

Extremely unlikely

12. There are published air quality stories which refer to the [system name]. How likely do you think that reading these stories make people care about air quality problems?

Extremely likely

Likely

Neither likely nor  
unlikely

Unlikely

Extremely unlikely

## [Images of the system]

13. Please rate the importance of the features on the [system name].

[Skip the ones that you do not know]

|  | Extremely important   | Very important        | Moderately important  | Slightly important    | Not at all important  |
|--|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| Short stories on the first page  | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| The timelapse video  | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Zooming in and out of the video  | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Sharing a web link of a view and time                                    | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Smell reports  | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Line charts showing sensor readings                                      | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| The line chart showing smoke detection                                   | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| The map showing sensor values  | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| The thumbnail tool that people can use to manually generate smoke images | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| The automatic smoke detection tool which produces smoke images           | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Smoke images which were shown during the community meeting with the EPA  | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

14. Do you have other comments?

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15. What is your age?

- |                             |                             |
|-----------------------------|-----------------------------|
| <input type="radio"/> 18-24 | <input type="radio"/> 55-64 |
| <input type="radio"/> 25-34 | <input type="radio"/> 65-74 |
| <input type="radio"/> 35-44 | <input type="radio"/> 75+   |
| <input type="radio"/> 45-54 |                             |

16. What is your education level

- |   |   |
|---|---|
| <input type="radio"/> No formal educational credential  | <input type="radio"/> Associate's degree              |
| <input type="radio"/> High school diploma or equivalent | <input type="radio"/> Bachelor's degree               |
| <input type="radio"/> Some college, no degree           | <input type="radio"/> Master's degree                 |
| <input type="radio"/> Postsecondary nondegree award     | <input type="radio"/> Doctoral or professional degree |

*You have completed the survey. This survey is part of the [system name] research. Thank you very much for your participation.*