

# Digital Transparency in the Public Realm Co-design Facilitation Guide

# About this Guide

## HELLO!

This Co-Design Guide was developed as part of the co-design project [Designing for Digital Transparency in the Public Realm](#) –which seeks to facilitate the co-creation of prototypes that can advance digital transparency and enable agency in the world's public spaces.

With cities increasingly embracing digital technology in the built environment, we believe people should be able to quickly understand how these technologies work and the purposes they serve. We believe that creating a unified visual language is a critical starting point, and that digital tools could help people to follow up and learn more.

For this project we convened groups in cities around the world, co-hosting co-design sessions and holding online meetings known as “shareouts,” to collaborate and prototype an initial set of open standards for digital transparency in the public realm.

At each of these co-design sessions, we collaborated to define the key themes that are important to communicate in the public realm. We also brainstormed concepts for communication systems (such as icons) and experiences (information tools such as apps) where these themes can apply.

This Co-Design Guide and Workshop Materials were created by [Sidewalk Labs](#) in collaboration with [Projects by IF](#) and [Puncture Design](#). We are releasing this facilitation guide, along with all the materials used to support these sessions, so that anyone can use them to engage with the crucial topic of how technology is increasingly integrated into the public realm.



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# **Table of Contents**

## **FULL DAY SESSION GUIDE**

### **Pages 4 to 23**

At the workshops, we give an overview of the technologies already in use throughout the public realm today, and ask participants to let us know what questions they have about those technologies and the data that is collected. We use cards to prompt conversations about people's thoughts and feelings around the ethics of data collection. These are then clustered into themes that the group deems important for the prototypes and design concepts to convey.

This section details step-by-step, how to use the co-design session materials to facilitate this process for a full day session.

## **TEMPLATES FOR SHORTER SESSIONS**

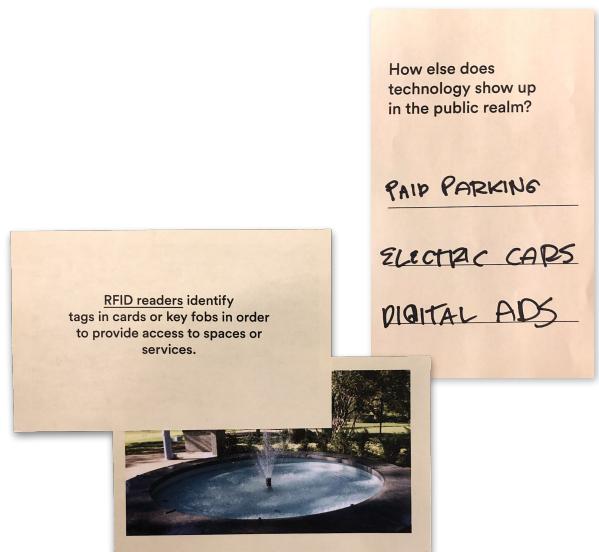
### **Pages 24 to 26**

This section details how to adapt the Full Day Session Guide into shorter sessions that can be run for different audiences and settings. It refers to the activity descriptions in the Full Day Session Guide.

# Agenda (Full Day)

**ARRIVAL (9:30 AM–10:00 AM)**

- 30 minutes  
Name tags & Groups & Forms



*What technology is being used today?*

## **INSPIRATION (10:30 AM–10:45 AM)**

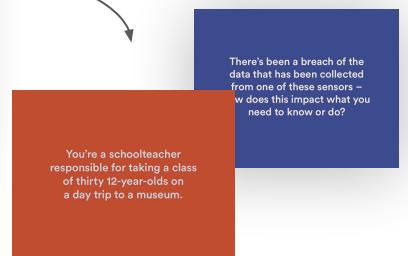
- 15 minutes  
*The Landscape of Technology in the Public Realm*



## *The Daily Needs in a Digital World*

## SITUATIONS + TECHNOLOGIES (10:45 AM–11:00 AM)

- 15 minutes  
*What technology is being used today?*



#### **DEBRIEF: DISCUSS + GROUP (11:30 AM–12:00 PM)**

- 30 minutes

*Top considerations from each group*



## *Top Considerations in Each Group*

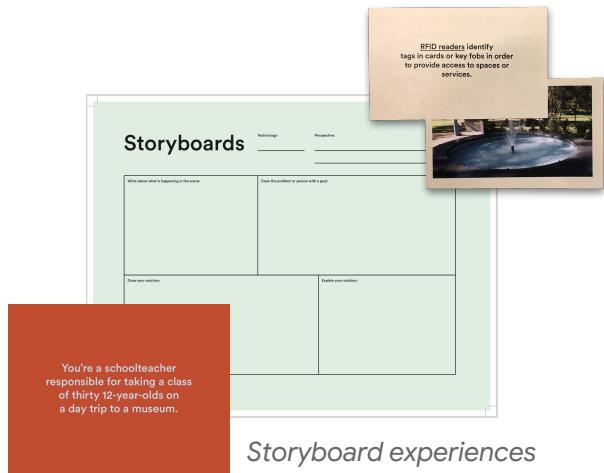
# Agenda (Full Day)

**WORK SESSIONS:**  
**BREAK WHEN YOU NEED TO**

## STORYBOARD (1:30 PM–2:15 PM)

-45 minutes

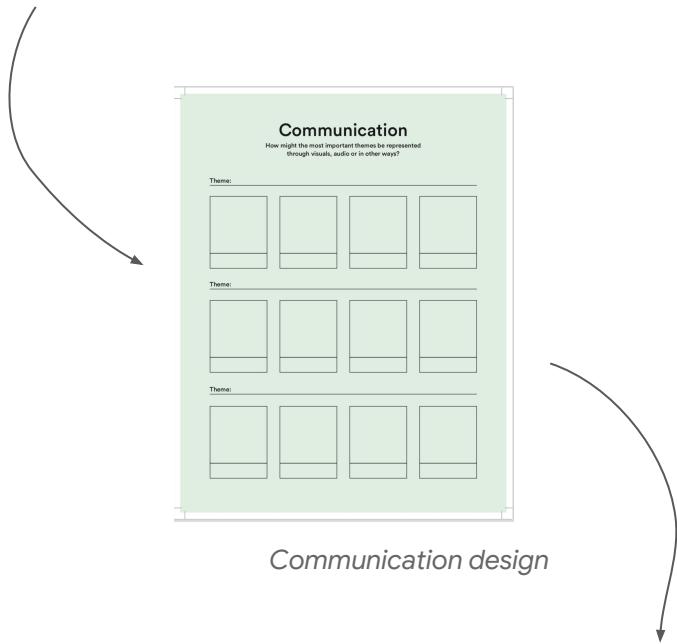
*How might we communicate answers to the questions people have in the public realm?*



## COMMUNICATION (2:15 PM–2:45 PM)

-30 minutes

*Work up a communication system (digital and/or physical)*



## GROUP IDEAS (2:45 PM - 3:15 PM)

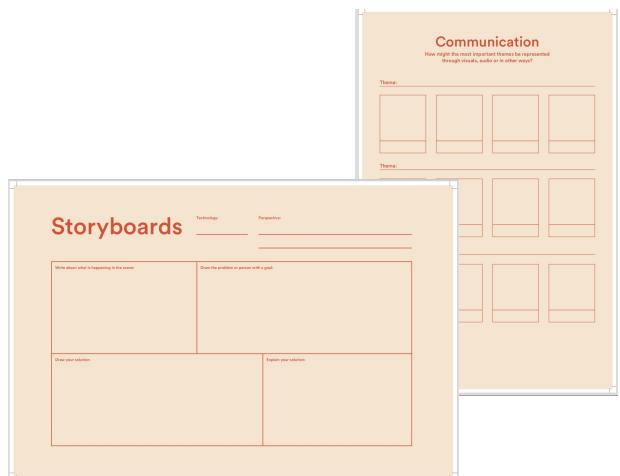
-30 minutes

*Discuss the ideas as group and develop systems together*

## FINAL SHARE OUT (3:15 PM–4:00 PM)

-45 minutes

*Share your storyboards and communication systems*



# Arrival

**Name Tags / Stickers** - for every participant and facilitator

**Contributor Licence Agreement** - Have a CC licence agreement for people to sign so that you can open source the materials produced from the day. Let people opt in to being attributed or not, and give them an easy way to change their mind later (e.g. an email to contact).

**Groups** - Assign people to a group when they arrive. Bear in mind that the groups should have a good mix and the numbers should be balanced.

**Note-taking** – while there are materials designed to work with each of the activities, it can be helpful to have a notetaker

**Photos / Video** - If you plan to document the day, give people a way to opt out e.g. a sticker they can wear to indicate they don't want to be in photos.

**Code of Conduct** - Have a code of conduct for the day and make this available for people to review when they sign in.

**Agenda & Design Process** - Give people a handout for the agenda and the design process so they know what to expect.

# Welcome

10:00 AM – 10:30 AM (30 minutes)

Participants sit down in their assigned groups. We go over:

- Agenda for the day (timings)
- Output of the day and what will happen next
- Code of Conduct, who to talk to
- Sticky wall: Who would use this?
- Sticky wall: How did you feel about today?

After this quick intro we kick off with our first activity - goals and intros.

## Facilitators:

Participants in each group should briefly introduce themselves to each other.

- Who are you?
- What skills do you have?
- What are you hoping to get out of today?

Nominate one person in each group to summarise and introduce their group to the rest of the room.

Good Morning –

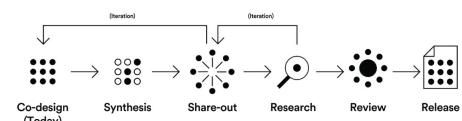
## Designing for Digital Transparency in the Public Realm

Sidewalk Labs.

Today –

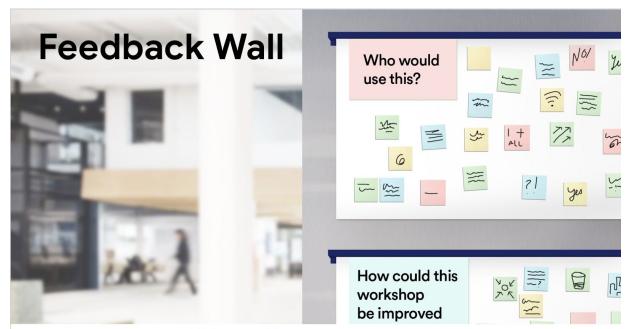
- |          |                                       |
|----------|---------------------------------------|
| 10:00 am | • Welcome & Intro                     |
| 10:45 am | • Technologies                        |
| 11:00 am | • Considerations                      |
| 11:45 am | • Share Out                           |
| 12:15 pm | • Lunch                               |
| 1:00 pm  | • Taxonomy + Visual System + Channels |
| 3:30 pm  | • Share Out                           |
| 4:30 pm  | • Closing (4:30 pm–4:45 pm)           |

## What happens after today?



10:00 am – 10:45 • Welcome & Intro

## Feedback Wall



10:00 am – 10:45 • Welcome & Intro

# Context & Inspiration

10:30 AM – 10:45 AM (15 minutes)

## Context & Inspiration

- Why does digital transparency in the public realm matter?
- Define the problem - show some examples of how technologies manifest in public spaces and how we encounter them today
- Share some inspirational examples of how others are approaching this problem
- Set the parameters for what you hope to achieve today

## Why Digital Transparency Matters

Sidewalk Labs has Urban Data is data collected in a physical space in the city, which includes:

Public spaces, such as streets, squares, plazas, parks, and open spaces

Private spaces accessible to the public, such as building lobbies, courtyards, ground-floor markets, and retail stores

Private spaces not controlled by those who occupy them (e.g. apartment tenants)

10:00 am - 10:45 am • Welcome & Intro



**A Public Commute**  
This is a quick exercise to examine the many kinds of information that is conveyed within and about the public realm. Even on a short commute, there are many pieces of information competing for my attention. We should seek to understand how people take in this information, and what kinds of attributes are most important when it comes of digital privacy in public.

## From around the world



Seattle: Master List of Surveillance Technologies



Chicago: Array of Things



Barcelona: Smart Citizen

10:00 am - 10:45 am • Welcome & Intro

## Top questions for the group

How to make these big concepts accessible?

How do we integrate understanding in the built environment?

How do we give channels to people to learn more?

10:00 am - 10:45 am • Welcome & Intro

# Situations + Technologies

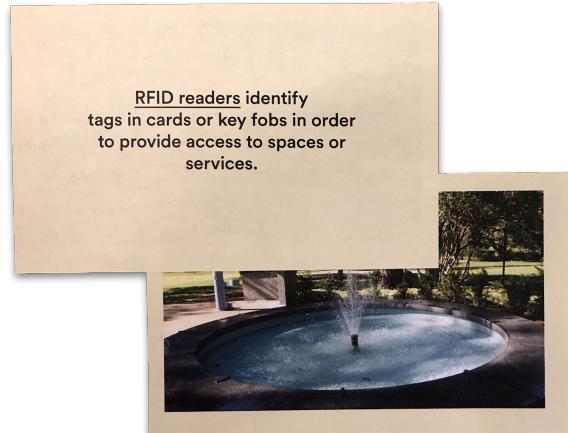
10:45 AM – 11:00 AM (15 mins)

The goal of this activity is to get everyone at the table familiar with the different technologies in use in the public realm today.

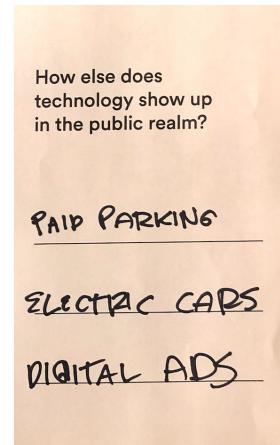
It's also a warm up activity to get the group comfortable filling out cards.

## Facilitators

- Prompt the group to look through the set of Sensor Cards that are in front of them, and discuss them with each other
- Encourage people to fill out cards for sensors, technology, or data that is not represented using the blank cards that say "How else does technology show up in public spaces?"
- Folks should feel like they can suggest any type of technology, there are no limits here



Sensor Cards



Example of a filled out Technology card

# Brainstorming: Questions

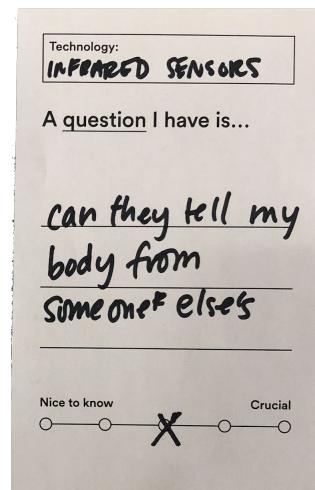
11:00 AM–11:30 AM (30 mins)

The goal of this exercise is to come up with as many unique questions as possible. More is better.

## Facilitators

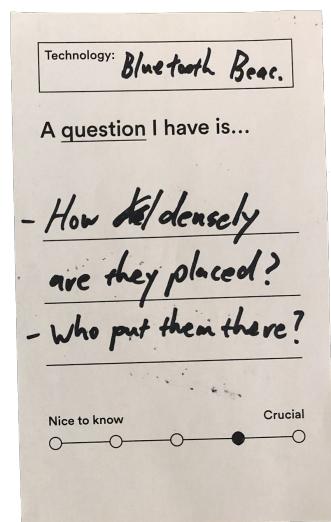
- Divide the group into pairs
- Direct each pair to pick a piece of technology, discuss the tech, and respond to the prompt “a question I have is...”
- It’s important to encourage participants to come up with unique questions rather than repetitive ones, this will help the activities later on
- Make sure participants only fill out one question per card
- Ask them to articulate the WHY behind each question on the card:
- Some prompts you can use are:
  - How does having this technology here make you feel?
  - How do you think this affects the city?
  - How does this affect or help you?
- See the next two pages for some additional prompts to help participants generate more unique questions

## DO



Example of a Question Card filled out correctly

## DO NOT: WRITE MORE THAN ONE QUESTION



Example of a Question Card filled out incorrectly - if more than one question is written on a card, it will be difficult to conduct the next exercise (clustering the questions into themes)

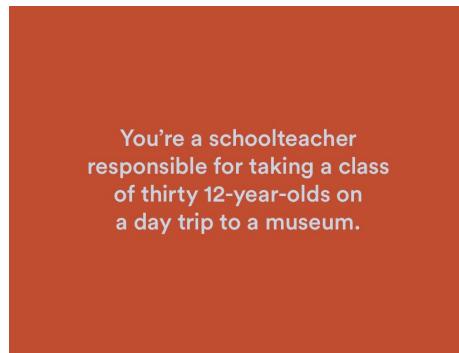
# Brainstorming: Perspective Shift

11:15 AM–11:30 AM (15 mins)

The goal of introducing the Perspective Cards is to get the group to think of new, unique questions from more diverse perspectives.

## Facilitators

- Introduce the perspectives when the people have filled out a few question cards
- Give each pair **a red perspective card**
- Encourage them to consider the perspective and to fill out more consideration cards from that perspective
- Pairs can pick new technologies to respond to, or work with the same technologies as before
- There are some blank perspective cards - let participants know they can also suggest a new perspective



Perspective cards

# Brainstorming: Considerations (Optional)

11:15 AM–11:30 AM (15 mins)

Consideration cards

The goal of introducing the Consideration Cards is to get the group to think of new, unique questions, taking into account broader, ethical considerations.

Facilitators

- These cards are optional prompts - if the group is already talking about these issues, you don't need to use them
- Give each pair [a blue consideration cards](#)
- There are some blank consideration cards - let participants know they can also suggest a new perspective

There's been a breach of the data that has been collected from one of these sensors – how does this impact what you need to know or do?

Consideration

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# Debrief: Discuss and Group the Questions

11:30 AM–12:00 PM (30 minutes)

The goal is for each table to discuss their questions and sort them into themes. They will use these themes as input for the creative exercises.

## Facilitators

- Ask each pair to share their questions
- Moderate a discussion in the group
  - What was similar? What was different?
  - Do some technologies spark unique questions?
- Get the group to sort the cards into themes based on similarities
- Once they are happy with the themes, give each one a name (e.g. ownership, tracking, public benefit)
- Get the group to fill out the worksheet listing each theme and some examples of the questions that inspired it

Themes	
3) Theme: <b>SECOND ORDER EFFECTS</b>	5) Theme: <b>POLITICAL X JUDGEMENTS</b>
Question: CAN LICENSE PLATE BE USED FOR VARIOUS PURPOSES?	Question: <b>LEGAL BOUNDARIES BETWEEN CITIES, COUNTIES, AND STATES</b>
Question: HOW TO ENHANCE POSITIVE SIDE-EFFECTS (SECONDARY USE) WHILE MINIMIZING NEGATIVE SIDE-EFFECTS (TRADE-OFFS)?	Question: HOW POLITICAL VIEWS AFFECT DATA POLICIES (LIBERAL VS. DEMOCRATIC VS. CONSERVATIVE)
Question: META-DATA ISSUES?	Question: <b>BLURRED BOUNDARIES BETWEEN PRIVATE &amp; PUBLIC?</b>
4) Theme: <b>DATA OWNERSHIP / RETENTION</b>	2) Theme: <b>ANALYTICS</b>
Question: WHO COLLECTS, STORES, TRANSFERS DATA?	Question: SYNERGETIC EFFECTS? DATA INFERENCES?
Question: WITH WHOM IT'S SHARED?	Question: TRANSPARENCY OF ALGORITHMS
Question: POLITICAL DIFFERENCE (LIBERAL/CONSERVATIVE)	Question: DURATION OF RETENTION?
5) Theme: <b>DATA MANAGEMENT</b>	6) Theme: <b>PRIVACY &amp; SECURITY</b>
Question: RIGHT TO BE FORGOTTEN (FOR EVER KNOWN)?	Question: INVASION? CITIZENS' POWER OVER PERSONAL DATA?
Question: DO GUARDIANS OF MINORS GET ALERTED?	Question: RESPONSIBILITY OVER VIOLATIONS (HACKS, BREACHES, PROTECTIONS FOR VULNERABLE POPULATIONS)
7) Question: <b>DO PEOPLE HAVE CONTROL/TOOLS? (NOTIFICATION ALONE IS NOT ENOUGH) HABITUATION?</b>	Question: DO CONSUMERS HAVE A EQUAL CHANCE? SHOULD COMPANIES BE MANDATED TO?

Themes Worksheet - use to develop key ideas a system has to convey based on groups of questions

# Share Out

**12:00 AM – 12:30 PM (30 minutes)**

The goal of the share out is to hear a diversity of themes and questions. If something has already been said by another table, try to pick a different one.

## Facilitators

- Nominate one person to share one of the themes they came up with and a few of the questions that inspired it

**Share out** - 2 minutes each

# Lunch

**12:30 PM – 1:15 PM (45 minutes)**

Break for lunch. Participants eat, chat, check email etc.

## Facilitators:

- Tidy the table
- Keep the Question, Perspective and Consideration cards for reference later - but tidy them to one side
- Remove the large “scene” cards
- Photograph the filled out Questions and Themes template so that they can be easily documented

# Post-Lunch Warm Up

**1:15 PM – 1:20 PM (5 minutes)**

Intro the afternoon:

- Thank everyone for their participation so far
- Shift in focus - now that we've defined the questions we have, the afternoon is going to focus on being creative about ways we could answer those questions
- Share a few more inspirational examples of how others have communicated complex topics in ways that are easy to understand and engage with

Consider doing a quick physical energizer for the whole room to shake off the post lunch lethargy e.g.

<http://toolbox.hyperisland.com/shake-down>

# Mix tables and re-intro

**1:20 PM – 1:30 PM (10 minutes)**

The goal is to have an opportunity to meet new people and to warm up participants for the creative exercises.

## Facilitators

- Go round the table giving each person the number 1 or 2
- All the 2's stand up and move to the table next to them on the right
- Once the tables have changed, give everyone a blank sheet of paper and a thick marker pen
- At each table, turn to face someone you're sitting next to
- Introduce yourself to each other
- Give each pair 1 minute to draw the person opposite them without looking at the sheet of paper
- Go round the table, introducing the person you drew and showing your drawing

# Storyboards

1:30 PM – 2:15 PM (45 minutes)

The goal is to develop creative ideas for how to communicate answers to the most important questions identified in the morning.

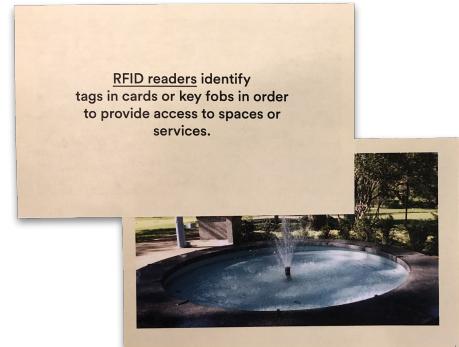
## Facilitators

- Divide the table into pairs
- Introduce the Sensor Cards
- Get each pair to pick a Sensor card and a Perspective card at random
- Introduce the Storyboard Template
- Get each pair to imagine a scenario where this person encounters this technology and draw or describe it
- Pick the most important questions to answer about this technology, based on what the group identified in the morning
- Sketch or describe a way to answer the questions that would meet the needs of this person in this scenario
- Once the pair has finished a storyboard, get them to pick a different sensor and perspective card and draw a new idea

## 2:05pm share ideas with the table

- Each pair shares their storyboards with the rest of the table
- Facilitators should take notes on the discussion so that the interesting points aren't lost

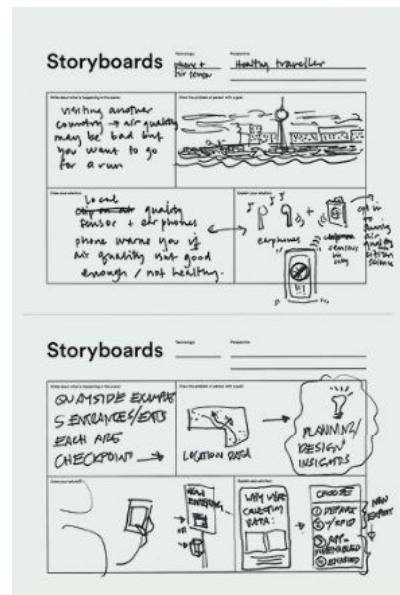
## Sensor Cards



## Perspective Cards



## Storyboard Template



# Communication

2:15 PM – 2:45 PM (30 minutes)

The goal is to develop ideas for how to communicate the most important themes through visuals, audio or in other ways.

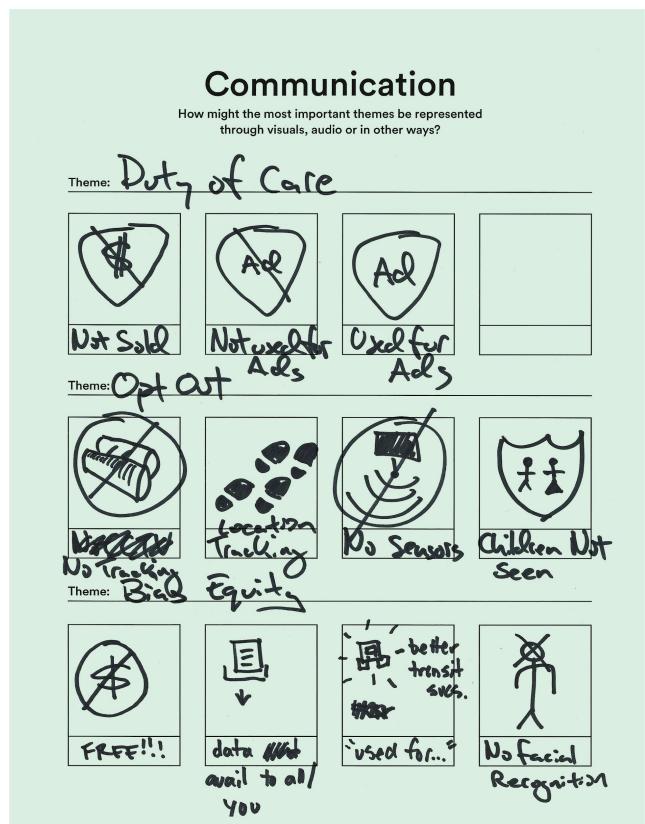
## Facilitators

- Divide the table into different pairs
- Introduce the communication worksheet
- Get each pair to pick the themes they think are most important to communicate
- Encourage the pairs to sketch how these each could be represented through visuals, audio or other modes

## 2:35pm share ideas with the table

- Each pair shares their ideas with the rest of the table
- Facilitators should take notes on the discussion so that the interesting points aren't lost

## Communication Worksheet



# Group Storyboard & Communication Ideas

2:45 – 3:15 PM (30 minutes)

The goal is to share the most unique angles on solving for Digital Transparency in the Public Realm. These concepts will be taken, refined, and tested with real people later on.

## Facilitators

- Based on the discussions, get the group to pick a storyboard and communication approach they want to share out
- Fill out the large format worksheets
- Nominate someone to share the worksheets

## Storyboards

Technology:

phone +  
air sensor

Perspective:

Healthy traveller

Write about what is happening in the scene:

visiting another country → air quality may be bad but you want to go for a run

Draw the problem or person with a goal:

Draw your solution:

local  
chip on  
quality  
sensor + earphones  
phone warns you if  
air quality isn't good  
enough / not healthy.

Explain your solution:

## Communication

How might the most important themes be represented through visuals, audio or in other ways?

Theme: Duty of Care

Sold

Not used for  
Ads

Used for  
Ads

Ear

Location  
tracking

No Sensors

Children Not  
Seen

?

↓

- better  
transit  
syst.

No Facial  
Recognition

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# Share Back

**3:15 PM – 4:00 PM (45 minutes)**

This is the final share out for the day.

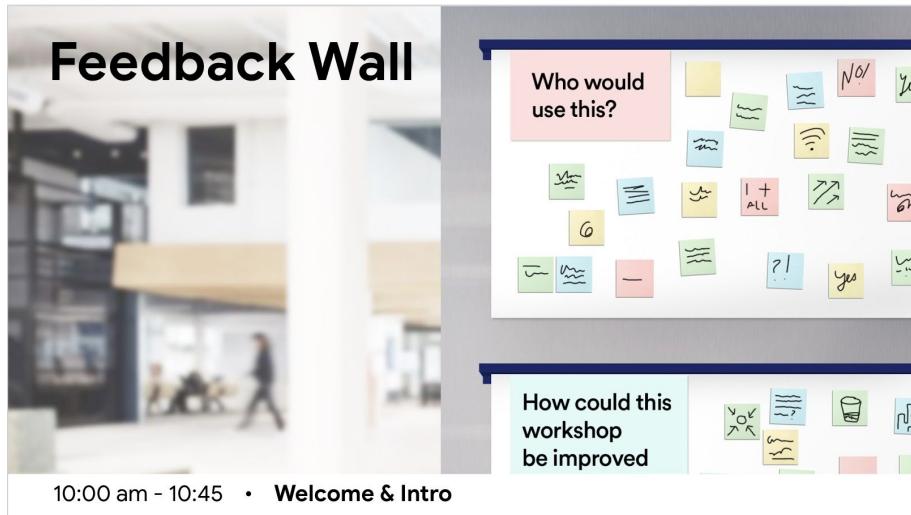
Each team presents their best ideas using the large format worksheets.

# Closing

**4:00 PM – 4:15 PM (15 minutes)**

## Facilitators

- Get your table to reflect on their goals from the beginning of the day
  - Ask:
    - Do you know who would use this?
    - How can this workshop be improved next time?
  - Capture comments on stickies to add to the feedback wall



# What's Next

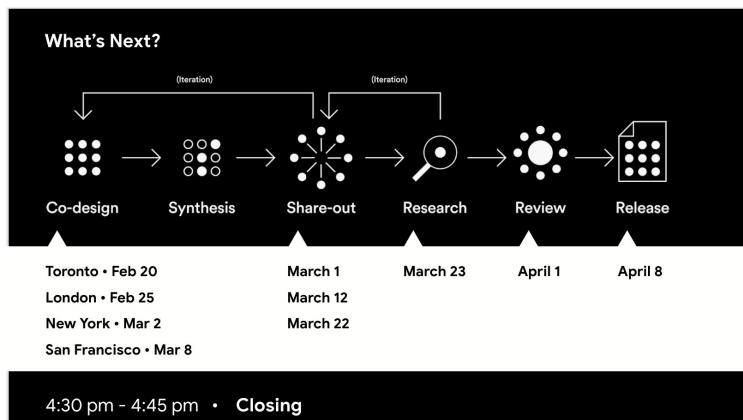
**4:15 PM – 4:30 PM (15 minutes)**

End with a reminder of what happens next, how the work will be used, and clearly identify any opportunities for further input.

For example, for the development of the initial prototypes we decided to hold web critiques, open to anyone who wants to join.

## Facilitators

- Label all worksheets with the group so it's easy to identify which group came up with which ideas
- Photograph the worksheets
- Hold a debrief session:
  - Review participant feedback and cluster into themes
  - What insights did you discover?
  - What did you observe?
  - What worked / didn't work?



# **Variation A:**

## **Shorter Workshop for Smaller Groups (3 hours)**

Run the same session with shorter timeframes.  
This would work well with a smaller group of up to 25 people.

### **ARRIVAL (9:30 AM–10:00 AM)**

Name tags & Groups & Forms

### **WELCOME & INSPIRATION (10:00 AM–10:15AM)**

Introductions, Logistics & The Landscape of  
Technology in the Public Realm

### **TECHNOLOGIES, QUESTIONS & THEMES (10:15 AM–11:00 AM)**

What technology is being used today? What questions does that raise? What are the themes?

### **SHARE OUT (11:00 AM–11:15 AM)**

Each group shares a theme and the questions that inspired it

### **BREAK & REMIX (11:15 AM–11:30 AM)**

Short break and remix the groups

### **STORYBOARDS (11:30 AM–12:00PM)**

Create storyboards showing how people might experience new ways to understand the technologies used in public spaces

### **COMMUNICATION (12:00 PM–12:15 PM)**

Ideas for how to communicate the most important themes visually, aurally or in other ways

### **GROUP STORYBOARD & COMMUNICATION (12:15 PM – 12:30 PM)**

Create a group storyboard and communication approach

### **SHARE OUT (12:30 PM–12:50 PM)**

Share your storyboard and communication approach

### **CLOSING & WHAT'S NEXT (12:50 PM–1:00 PM)**

Review of today's work and how to stay involved

# **Variation B:**

## **Exploring Questions Raised by Technologies in the Public Realm (1 hour)**

A short session to help people engage with the topic and explore the questions it raises.

### **WELCOME (10:00 AM–10:05 AM)**

Define the problem - technologies are in use in the public realm today but often invisible and opaque

### **TECHNOLOGIES (10:05 AM–10:10 AM)**

What technology is being used today?

### **QUESTIONS (10:10 AM–10:30 AM)**

In pairs, what questions do these technologies raise? Use perspective & consideration cards to explore new questions

### **THEMES (10:30 AM–10:45 AM)**

In small groups discuss the questions. Can these be sorted into themes?

### **SHARE OUT (10:45–11:00 AM)**

Each group shares one interesting theme and the questions that inspired it

# Variation C:

## Imagining Ways to Increase Transparency for Technology in the Public Realm (1 hour)

A short session to get people to come up with ideas for how to address the problem.

### **WELCOME** (10:00 AM–10:05 AM)

Define the problem - technologies are in use in the public realm today but often invisible and opaque

### **SKETCH WARM-UP** (10:05 AM–10:10 AM)

Draw the person next to you and introduce them to the group

### **STORYBOARD** (10:10 AM–10:40 AM)

In pairs, pick a perspective card + a sensor card + a question card. Draw a scenario showing how this person might get an answer to this question about this sensor. Pick new cards and repeat.

### **SHARE OUT** (10:40 AM–10:55 AM)

Each pair picks a storyboard to share with the rest of the group

### **WRAP-UP** (10:55–11:00 AM)

What's next and how to stay involved