Responsible Data Use Assessment for CommonSpace

Overview of the Product:

Public life studies are used to develop a better understanding of how public spaces serve the needs of people and communities. Today, these studies are largely done with pen and paper, increasing the cost, and decreasing the reliability of these studies. CommonSpace is a map-based data collection mobile application that makes it easier to record observations of human activities in open spaces.

How it works:

People who are interested in conducting a public life study — city planners, designers, community groups, etc — can create a study using a web portal for CommonSpace. A study organizer begins by defining their research question and then configuring the needed observations into the app. CommonSpace implements an open data standard known as the Public Life Data Protocol which only specifies non-identifying information about individuals. Then, study organizers recruit surveyors to conduct the study, who are assigned "shifts" in the public space. The surveyors spend time in the space and use the CommonSpace mobile app to record data about what they observe at defined intervals to capture a snapshot of public life activity.

Afterwards, study organizers download the data and are able to post their study and publish the underlying data on a public data portal.

These screens show a demo example of a public space that has been selected for a public life study. These categories are from the Gehl Institute's Public Life Data Protocol.
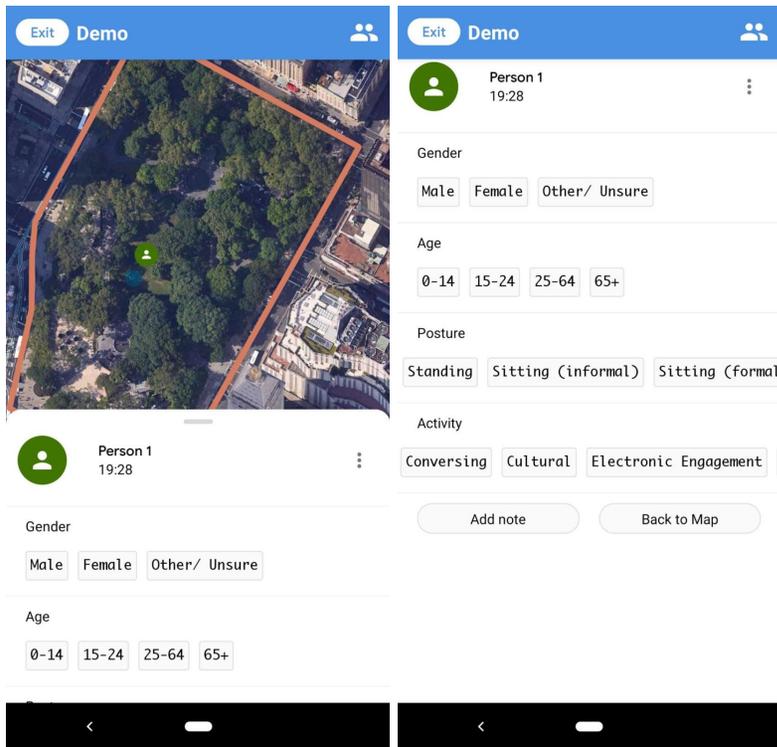
Privacy and Data Governance Considerations:

CommonSpace supports the collection of data about the characteristics of people and their activities in the public realm, through the practice known as public life studies. This falls under the category of non-identifying information about individuals ("non-personal data").

The app is designed in such a way to discourage the collection of personally identifiable data of anyone whose activity is observed through a public life study. Instead, broad demographic attributes of people, such as gender and age range, is determined by the surveyor and entered into the app by the surveyor conducting the study. A surveyor may input free-form comments about their

observations. This is typically for quality assurance purposes or to record activities not captured in the standard format provided by the Protocol. Surveyors are instructed not to enter personal information into the free-form comments field and in-line instructions in the app will remind them of this.

CommonSpace collects the surveyor's email address for the purpose of logging in and authenticating them so they can complete the assigned public life study.

Mitigation efforts:

While there is a small risk that surveyors may record personal information into the free form comment field, this is mitigated by two factors. First, surveyors receive instruction during training to not record personal information, and second, the app includes text on the interface reminding surveyors to not record personal information. Furthermore, even if the surveyor did record information that was possibly identifiable to an individual, the free form comment field will not be published in publicly accessible data sets, limiting the impact of harm.

The screen that surveyors see when they click "Add note":

Cancel   Done

Add a note
Avoid using personally identifying information

Done
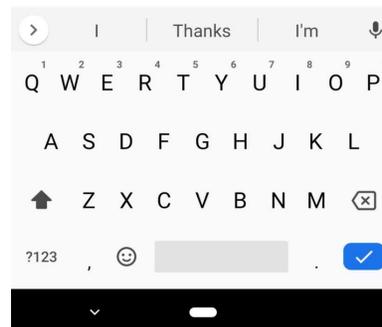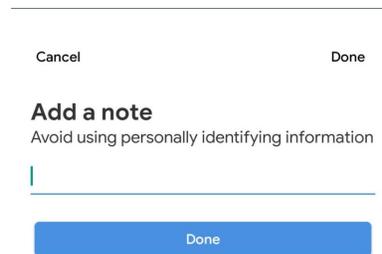
Stakeholder Concerns:

Sharing and Access to Data

For versions of CommonSpace that can be downloaded on apps stores in Canada and the US, Sidewalk Labs maintains custody of the data with control granted to study organizers, who have full ability to manage and delete data. Sidewalk Labs will not access the data for its own benefit, sell it, or share it with third parties.

The open source code for CommonSpace is also available online on Github for use in any location (Apache 2.0 license). When users use this code to build their own version of CommonSpace, Sidewalk Labs does not have custody or control of any data collected via that build of the application, nor could Sidewalk Labs store or access that data.

CommonSpace allows data to be published and made publicly accessible. Data will not be published automatically, and study organizers must select a toggle to publish the data set.

Data Storage

Data for CommonSpace is stored on GCP cloud servers in Montreal. It is retained until study organizers, who control the data, request for it to be deleted or until the service is terminated.

Minimum Technology Used and Data Collected to Meet the Objectives

The current method of collecting public life study data is by designing and printing forms that surveyors use to manually collect data using clipboards. The CommonSpace app allows a process that involves over a dozen steps to be reduced to five steps. The app also ensures that data is recorded using the Public Life Data Protocol - an open data standard published by the Gehl Institute, in partnership with Gehl and city agencies in Europe and the US - to standardize the data collection process across cities and places. As a digital data collection tool, CommonSpace improves on existing methods of data collection (which are paper based) through a consistent data collection workflow and standardized fields. Further, by eliminating the lag between data capture and data availability (as data no longer needs to be transcribed), CommonSpace makes it possible for study organizers to more quickly review collected

data and identify any potential issues or opportunities. CommonSpace is designed with privacy in mind and informs surveyors to not record personal information of the people being observed in public spaces.

Visual comparing the current process with the new process made possible by CommonSpace:

Note: current process steps were informed by SF Planning's Mobile Data Collection Pilot (link)

Summary:

Understanding how people use parks, plazas, and neighbourhood spaces enables communities and governments alike to understand the impact of design and programming on public life and better target resources. Urbanists have a decades-long tradition of using data to understand how people interact with parks and public spaces. CommonSpace will enable efficient and consistent public life data collection while ensuring that the privacy of those being observed in public spaces is respected.