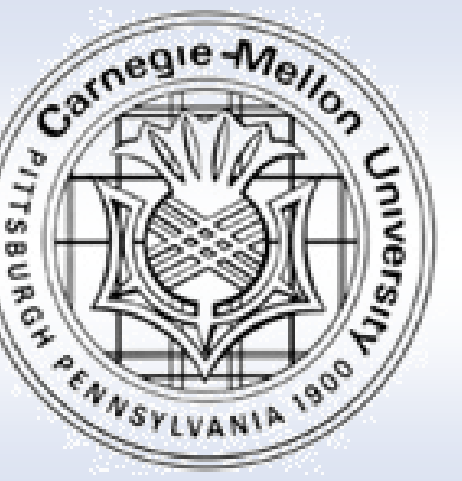


# Location tracking and willingness to disclose personal information

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## Goals

- **High level:**  
How to incentivize people to fill in their **Census form online** rather than on paper, thus reducing the high costs related to data collection?
- **Specifically for this project:**  
One way to incentivize online participation is to make it less burdensome to citizens, for instance by **pre-populating some fields** which are known or can be easily derived from sources such as administrative data
- Example: Many online services track users' **location data** (e.g., IP address, country, city, zip code) in ways that are at times even unknown to the users. The issue is not one of technical feasibility, but a socio-psychological one
- We need to understand:
  1. How people might **react to location tracking**
  2. Specifically, how they might react to **tracking by government institutions**



- Some scenarios (Source: PhoneArena.com)



## Methodology

- We will rely on **experiments** in the form of online surveys, with participant recruited either at Carnegie Mellon University or through online communities



- Randomly assign participants to one of four conditions:

### 1. "No Tracking"

### 2. "Edit location" condition

Before we begin with the actual questions, please first verify that the information below is correct. If it is not, you may edit it.

Current City	<input type="text" value="Pittsburgh"/>
Current Country	<input type="text" value="United States"/>
Current Zip code	<input type="text" value="15213"/>

or, mark the box below

☐ I ask that you do not track my current location

### 3. "Show location" condition

Before we begin with the actual questions, please first verify that the following is correct.

Our system identified that you are currently at Pittsburgh, United States, zip code 15213.

☐ That's correct  
☐ That's incorrect  
☐ I prefer not to say

### 4. "Ask Location" condition

Before we begin with the actual questions, please tell us your current location.

Current City	<input type="text"/>
Current Country	<input type="text"/>
Current Zip code	<input type="text"/>

or, choose not to disclose your location

☐ I prefer not to say

- We also manipulate the **entity** behind the survey (**governmental or not**)
- **Dependent variable:** willingness to reveal typical information asked in the Census form (e.g., name, gender, age, DOB, race, phone number) or other sensitive information (e.g., preferences, unethical behaviors)

## Hypotheses

- We suspect a somewhat **inverse-U-shaped effect** of location tracking on willingness to disclose personal information
- Pre-populating certain parts of a questionnaire (in this case, location, but it could be anything the Census may have access to, for instance through administrative data) may **reduce fatigue** and therefore increase participation, but only up to a point – if the person feels monitored, surveilled, and thus uncomfortable with various entities tracking her behavior online, her **privacy concerns** might kick in, lowering her willingness to disclose

## A way forward

- In collaboration with the Center for Survey Measurement at the Census Bureau, we are testing different elements of an online questionnaire that might result in lower perceived privacy intrusion, and therefore higher cooperation by citizens in participating to the initiative of online Census data collection. Examples:
- How to "best" advertise the initiative
  - "Best" intended as: the way that maximizes willingness to participate and to disclose
- Who the sender should be (e.g., Census Bureau vs. the Director of the Bureau)
- Whether to include data regarding the success of the initiative in other countries ("nudging" citizens to participate)