# /Activity Logs

### ParticipantStatusLogs<n>.csv

Contains information about the status of each of the  $^{\sim}1,000$  participants over the duration of the 15-month data collection period, recorded in 5-minute increments. This data ( $^{\sim}18$ Gb) is split across 72 files.

- timestamp (datetime): the time when the status was logged
- currentLocation (point): the location of the participant within the city at the time the status was logged
- participantId (integer): unique ID assigned to each participant
- currentMode (string): a string representing the mode the participant is in at the time
  the status was logged, one of {"AtHome", "Transport", "AtRecreation", "AtRestaurant",
  "AtWork" }.
- hungerStatus (string): a string representing the participant's hunger status at the time the status was logged
- sleepStatus (string): a string representing the participant's sleep status at the time the status was logged
- apartmentId (integer): the integer ID corresponding to the apartment in which the participant resides at the time the status was logged
- availableBalance (*float*): the balance in the participant's financial account (negative if in debt)
- jobId (integer): the integer ID corresponding to the job the participant holds at the time the status was logged, N/A if unemployed
- financialStatus (string): a string representing the participant's sleep status at the time the status was logged
- dailyFoodBudget (double): the amount of money the participant has budgeted for food that day
- weeklyExtraBudget (double): the amount of money the participant has budgeted for miscellaneous expenses that week

## /Attributes

### Apartments.csv

Contains information about residential apartments in the city

- apartmentId (integer): unique ID assigned to each apartment
- rentalCost (float): the monthly rent for the apartment
- maxOccupancy (integer): the maximum number of occupants the apartment can accommodate at one time
- numberOfRooms (integer): the number of rooms in the apartment
- location (point): the geographic location of the apartment (used for mapping)
- buildingId (integer): the integer ID corresponding to the building in which the apartment is located

### Buildings.csv

Contains information about the buildings in the city that were involved in this study; this includes commercial, residential and school properties.

- buildingId (integer): unique ID assigned to each building
- location (polygon): the geographic footprint of the building (used for mapping)
- buildingType (string factor): one of {"Commercial", "Residential", "School"}
- maxOccupancy (integer): the maximum number of occupants the building can accommodate at one time (if applicable) – blank otherwise
- units (*list of integer IDs*): a list of apartment, workplace, or school IDs corresponding to locations within the specific building.

#### Employers.csv

Contains information about the companies and businesses within the city limits that either employ study participants, or which have available job openings.

- employerId (integer): unique ID assigned to each employer
- location (point): the geographic location of the employer (used for mapping)
- buildingId (integer): the integer ID corresponding to the building in which the employer is located

#### Jobs.csv

Contains information about employment opportunities available in the city at the start of the study. Some of these jobs are held by participants at the start of the study, while others are open positions.

- jobId (integer): unique ID assigned to each job
- employerId (integer): the integer ID corresponding to the employer affiliated with this job
- hourlyRate (double): the hourly wage paid to this position
- startTime (*datetime*): the daily start time for this position
- endTime (datetime): the daily end time for this position
- daysToWork (list of weekdays): which days of the week this position runs
- educationRequirement (string factor): the minimum education level required to hold this position, one of: {"Low", "HighSchoolOrCollege", "Bachelors", "Graduate"}

## Participants.csv

Contains information about the residents of Engagement, OH that have agreed to participate in this study.

- participantId (integer): unique ID assigned to each participant
- householdSize (integer): the number of people in the participant's household
- haveKids (boolean): whether there are children living in the participant's household
- age (integer): participant's age in years at the start of the study
- educationLevel (string factor): the participant's education level, one of: {"Low", "HighSchoolOrCollege", "Bachelors", "Graduate"}
- interestGroup (char): a char representing the participant's stated primary interest group, one of {"A", "B", "C", "D", "E", "F", "G", "H", "I", "J"}. Note: specific topics of interest have been redacted to avoid bias.
- joviality (*float*): a value ranging from [0,1] indicating the participant's overall happiness level at the start of the study.

## Pubs.csv

Contains information about the pubs within the city limits.

- pubId (integer): unique ID assigned to each pub
- hourlyCost (float): the hourly cost to visit this pub. Note: Engagement City Blue Laws forbid offering per-drink discounts, but limited-scope wine and beer tastings billed hourly are permitted.
- maxOccupancy (integer): the maximum number of occupants the restaurant can accommodate at one time
- location (point): the geographic location of the pub (used for mapping)
- buildingId (integer): the integer ID corresponding to the building in which the pub is located

#### Restaurants.csv

Contains information about the restaurants within the city limits.

- restaurantId (integer): unique ID assigned to each restaurant
- foodCost (float): the Prix Fixe cost for study participants to dine at this restaurant
- maxOccupancy (integer): the maximum number of occupants the restaurant can accommodate at one time
- location (point): the geographic location of the restaurant (used for mapping)
- buildingId (integer): the integer ID corresponding to the building in which the restaurant is located

## Schools.csv

Contains information about the city's five schools.

- schoolId (integer): unique ID assigned to each school
- monthlyFees (float): the monthly cost associated with attending this school
- maxEnrollment (integer): the maximum number of students the school can accommodate at one time
- location (point): the geographic location of the school (used for mapping)
- buildingId (integer): the integer ID corresponding to the building in which the school is located

## /Journals

## CheckinJournal.csv

Contains information about participants' check-ins at various locations. This provides a compressed summary of the key location-event information contained in the Participant Logs.

- participantId (integer): unique ID assigned to each participant
- timestamp (datetime): the time when the check-in was logged
- venueId (integer): unique ID corresponding to the check-in location
- venueType (string factor): a string describing the venue type, one of {"Apartment", "Pub", "Restaurant", "Workplace"}

#### Financial Journal.csv

Contains information about financial transactions.

- participantId (integer): unique ID corresponding to the participant affected
- timestamp (datetime): the time when the check-in was logged
- category (*string factor*): a string describing the expense category, one of {"Education", "Food", "Recreation", "RentAdjustment", "Shelter", "Wage"}
- amount (double): the amount of the transaction

#### SocialNetwork.csv

Contains information about participants' evolving social relationships.

- timestamp (datetime): the time when the check-in was logged
- participantIdFrom (int): unique ID corresponding to the participant initiating the interaction
- participantIdTo (int): unique ID corresponding to the participant who is the target of the interaction

### TravelJournal.csv

Contains information about participants' motivation for movement around the city. This provides a compressed summary and additional context regarding location-event and financial transaction information contained in the Participant Logs.

- participantId (integer): unique ID corresponding to the participant in question
- travelStartTime (datetime): the time when the participant started traveling
- travelStartLocationId (integer): the unique ID corresponding to the location the participant is leaving when they begin to travel, NA if unknown
- travelEndTime (datetime): the time when the participant concluded their travel

- travelEndLocationId (integer): the unique ID corresponding to the location the participant is traveling to
- purpose (*string factor*): a description of the purpose for the recorded travel, one of: {"Coming Back From Restaurant", "Eating", "Going Back to Home", "Recreation (Social Gathering)", "Work/Home Commute"}
- checkInTime (datetime): the time when the participant checked in to their destination
- checkOutTime (datetime): the time when the participant left their destination
- startingBalance (double): the participant's starting balance at the beginning of their travels
- endingBalance (double): the participant's ending balance at the conclusion of their travels