THE OPEN
PUBLIC LIFE DATA PROTOCOL

VERSION: BETA | SEPTEMBER 27 2017

Please note that this version of the Protocol consists of flat text and elements.
Version 1.0 is scheduled for release later this year and will be published as an interactive file using open-source software.

PUBLIC LIFE DATA PROTOCOL
CONTENT OVERVIEW

Founded by Gehl Institute with Gehl, City of San Francisco, and Copenhagen Municipality
Tested, iterated, and refined by Gehl Institute with Gehl, City of San Francisco, Copenhagen Municipality, and Seattle DOT

Public Life Data Protocol
Version: BETA / September 27 2017

ABOUT

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ABOUT

A COMMON LANGUAGE FOR PEOPLE DATA

WE ARE PLEASED TO ANNOUNCE that Gehl Institute, in close partnership with Gehl, the practice, the Municipality of Copenhagen, the City of San Francisco, and with support and input from Seattle Department of Transportation, has developed a Public Life Data Protocol to standardise the collection and storage of data about people in public space. The Public Life Data Protocol is a data specification that aims to improve the ability of everyone to share and compare information about what people do in public space. The Protocol describes a set of metrics that are crucial to the understanding of public life in public space.

In the case of cities, it is important to not just measure car traffic or property values, but also public life—the activities of people in public space. By tangibly capturing how people relate to their urban environments, we create the public life data that can help shape how well the physical design and urban policy of cities suit the needs and desires of their residents. Further, when, how, and why we move through and stay in public space can be valuable information for cities to share and compare, both internally and externally. What if a small Midwestern U.S. town discovered its town square gets as much foot traffic as an historic plaza in Italy—would the U.S. town review its traffic plans? If a major city with multiple data-collecting agencies could apply standards for the data they collect about cyclists and pedestrians on streets and in parks, would that impact policy decisions?

In fact, we know this information is essential to good decision-making. In recent years, practitioners and cities have incorporated people-centered metrics and public life data into their engineering models, investment decisions, and design choices. These methods, based on decades of research, have now been applied in hundreds of cities around the world. There is tremendous potential to make the datasets more compatible, scalable, and comparable across different cities and regions.

Gehl Institute initiated the co-creation of the Public Life Data Protocol to make this process easier. It ensures a high level of quality and accuracy while enabling more people to collect, share, and compare their data. The Protocol will be open for any and all to use, and will create a common language for cities to compare different spaces within their city limits, and to then compare their data with other cities.

By making the Protocol open, we hope to lower the barrier to entry for cities, agencies, practitioners, researchers, or students who seek to utilise public life data in their work. We also hope to open the door to innovation, by enabling a greater degree of technology integration and solutions for studying public life, from data collection and analysis to enabling civic action and improved policy and investment decision-making. An open, common language brings us that much closer to achieving our goal of making people more visible to policymakers, designers, and planners in public space.

We look forward to welcoming new users of the Protocol, and to co-iterate future versions.

Yours Sincerely,

Shin-pei Tsay, Executive Director, Gehl Institute
and Team

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ABOUT
THE PROTOCOL AT A GLANCE

WHAT IS THE PUBLIC LIFE DATA PROTOCOL?

The Protocol describes a set of metrics that have been defined as crucial to the understanding of public life in public spaces, for cities, towns, and countryside.

The Protocol outlines how to collect, organise, and share data on people moving through, and people staying in, public space.

The Protocol is focused on quantitative data that can be collected via analogue observational studies or by using digital sensor technologies.

People moving through public spaces can be analysed by volume, age, gender, mode of moving, social clustering, carried objects, and activities undertaken while in motion. People staying in public spaces can be analysed by volume, age, gender, posture within the space, activities undertaken while staying in the space, objects brought into the space, social clustering, and exact geographical position. In the future, more study components may be added, based on the needs of the Protocol's users.

The Protocol also includes basic spatial metrics that are valuable when analysing public life in the context of its physical setting, such as street typology and space distribution.

The Protocol recommends always collecting qualitative data (e.g., user interviews, subjective observations), other types of quantitative data (e.g., user surveys, census data), and detailed public space data (e.g., location of trees, quality of storefronts) to support the quantitative observational studies.

WHY IS A PUBLIC LIFE DATA PROTOCOL IMPORTANT?

The Public Life Data Protocol will ease the collection, digitisation, analysis, and sharing of data on how people move through and stay in public space.

This type of data is important to provide city planners, urban designers, and citizens with a holistic and accurate picture of how well the public spaces in their cities invite a diversity of activities and people, so that action can be taken to create more livable and inviting environments for all.

The metrics presented in the Protocol are a means to identify and clarify the principal objective and quantifiable factors relating to public life, establishing a shared international language for this type of data, which can be accessed by all sectors. Urban designers may use the Protocol to create benchmarks for good design; politicians may use the Protocol to target their initiatives; citizens may use the Protocol to build cases for community improvements; researchers may use the Protocol to provide valuable insights into the impact of public life on, for example, public health, the economy, the environment, and democratic participation.

Furthermore, the Protocol will enable a greater integration of technological solutions into all processes of studying public life, from collecting and analysing data to enabling action.

Together, all of these benefits will promote and ensure a world-wide prioritisation of people's quality of life in cities, towns, and countryside.

WHO MADE THE PUBLIC LIFE DATA PROTOCOL?

The Protocol is the result of a collaboration between Gehl Institute, Gehl, San Francisco's City Planning Department, and Copenhagen's City Data Department, with input from Seattle Department of Transportation.

The Protocol is based on the public life research methodology originally developed by Jan Gehl, the renowned Danish professor of urban studies. Gehl's approach has been applied to studies in more than 100 cities worldwide over the course of thirty years. At the beginning of 2016, Gehl Institute identified the need to describe these public life metrics as a data protocol, thereby ensuring the scalability, consistency, and flexibility of public life data within a world that is both becoming more technologically advanced and more concerned with the quality of public life.

Gehl Institute invited Gehl (the practice), the City of San Francisco, and Copenhagen Municipality to participate in the updating and rewriting of the methodologies, acknowledging the long-standing experience and further methodological development that these agencies have with conducting public life studies (see: Conversation Summaries). Following a four-month interrogation of the methods, an internal BETA Protocol was proposed for field testing. At this stage, Seattle DOT joined the collaboration, contributing significant resources to carry out field tests and provide feedback.

The BETA Protocol presented in this publication is the incredible product of the knowledge, skills, and experiences generated through this collaboration, as well as of the input provided by a wide range of external advisors (see: List of Contributors).

Henceforth, the Protocol will be open for anyone to use, and Gehl Institute invites all stakeholders to contribute their thoughtful input and suggestions for further iterations.

WHAT ARE THE NEXT STEPS?

Stay tuned for more updates, supporting material, and opportunities to get involved with the Public Life Data Protocol.

In addition to the documents included in this publication, the Public Life Data Protocol, Version: BETA, will be followed up by more tests in the field, examples of public life data sets, presentation materials, examples of survey sheets, and more general survey guidelines explaining how to conduct a survey from A to Z. This material will be made available through Gehl Institute's web platform (see: gehlinstitute.org).

In preparation of the publication of the Protocol Version 1.0 later this autumn, the development team welcomes feedback from all stakeholders. Gehl Institute leads the communication of the Protocol at this stage. To provide input or get involved, please send an email to publiclife@gehlinstitute.org.

"We hope that the Public Life Data Protocol will enhance public life studies everywhere."
— Shin-pei Tsay, Gehl Institute

"We want to change the nature of the discourse of public life studies. It's a larger culture change towards a human-centered city. Data is a proxy for what we care about. Data is a proxy for public life."
— Neil Hrushowy, City of San Francisco

"We want to expand standard transportation performance metrics to go beyond mobility; we want to know how people *enjoy* the 27% of public space that is dedicated to our right-of-way. Qualitative data will support the future of our city and be a critical tool as we strive to create a vibrant and inclusive public realm."
— Benjamin de la Pena, City of Seattle

"We are thrilled that the collection of public life data is now standardized, making it easier for cities to benchmark the before and after impact of their work, compare themselves to other cities, and document medium- and long-term changes in the urban culture."
— Jeff Risom, Gehl

"Copenhagen is at its best when people meet each other in its outdoor spaces. This is when the city comes to life."
— CoCreate Copenhagen, 2015

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ABOUT
DEFINING A SHARED GOAL

WHAT MOTIVATED THE PARTNERS TO CREATE THE PUBLIC LIFE DATA PROTOCOL?
Before embarking on the task of defining the Protocol, Gehl Institute hosted workshops with the founding partners to identify what motivational factors the three agencies (SF, CPH, Gehl) had in common. When Seattle DOT joined the partnership, they were asked the same questions. The results of these conversations may be used as inspiration to any future Protocol users.

SHARED MOTIVATION

COMMON LANGUAGE
Public life data establishes a common language across different sectors and stakeholders that help centre people at the heart of any decision-making process.

EVALUATION TOOL
Public life data can be used to shape and evaluate the impact of public space on people in cities, on both a short-term project basis and relating to long-term development strategies.

CITIES FOR PEOPLE
Public life data is an integral component in pushing forward the overall movement of making cities for and with people, supporting important research, understanding, innovation, and, subsequently, change.

SHARED CHALLENGES

Lack of Customisation:
Even within a single city, different public spaces have unique qualities which, in turn, attract different users and uses. This reality demands some degree of customisation of the survey components for each space, which the current methodologies have some difficulty incorporating.

Few Processing Tools:
The available tools to process raw public life data are very limited, and every agency relies on its own competencies and resources to analyse the data. This challenge is especially prominent when the data has to be compared to other sources, like geo-spatial data, economic markers, and census statistics.

Limited Data Sharing:
It is currently difficult to benchmark projects managed by different agencies against each other, because of the multiple ways the public life data is stored, organised, and shared.

SHARED OPPORTUNITIES

Encourage Customisation:
With a Public Life Data Protocol, based on a robust framework of pre-defined scalable and compatible components, public life surveys can easily be customised by location and context, achieving both survey flexibility and data consistency.

Interchangable Tools:
With a Public Life Data Protocol, data processing tools can be exchanged between many different agencies, public and private, making it easier for all to interpret, understand, and make use of the public life data sets.

Worldwide Data Sharing:
With a Public Life Data Protocol, data collected by different agencies – whether those agencies are situated within the same city or on different continents – can be easily shared and read.

INDIVIDUAL MOTIVATIONAL FACTORS
Gehl Institute wishes to create a Public Life Data Protocol to ensure high levels of public life data quality everywhere and from anyone, to enhance the opportunities for collaboration between different agencies, and to improve the foundation for world-wide public life research and knowledge-sharing.

CITY OF SAN FRANCISCO

Common Language:
While it is really valuable to speak from numbers, it is still important to have a strong narrative around the data. Being able to have those people-centric conversations in urban design is a strong foundation for projects.

Collective Ownership:
The Planning Department is interested in encouraging public life data to become a more integral part of all other city agencies, so that their methodologies and projects have a larger sense of collective ownership within the city – they want to bring the seeds of innovation to all other departments without being seen as a niche agency.

Cultural Change:
The public life data collection is ultimately about catalysing a larger cultural change towards a human-centred city.

COPENHAGEN MUNICIPALITY

Common Language:
The public life data gives the city a clear language to discuss the valuation of urban life in public spaces.

Qualifies Decisions:
The public life data qualifies political and administrative decisions regarding the allocation of space, permits, resources, etc.

Incremental Learning:
The public life data helps the city learn the effects of projects in the short-term, giving them an opportunity to adjust for immediate improvements.

Inspire Innovation:
The public life data, in combination with other types of data, provides the city with new knowledge that can foster innovation.

Benchmarking:
The public life data is a way to benchmark projects against internal political goals and in relation to other cities.

SEATTLE DOT

Encouraging Vibrancy:
The Seattle Department of Transportation (SDOT) is working towards a safe, interconnected, vibrant, affordable, and innovative city, and believes that a vibrant city is where the streets and pavements hum with economic and social activity.

Measuring Impact:
SDOT is looking for ways to monitor and evaluate the performance of streets and public spaces beyond the movement of vehicles.

Formalising People-Centred Projects:
A standardised methodology and Protocol will allow the city to systematise the collection of data on public life on its streets.

GEHL

Making People Visible:
Public life data is a means of making people visible in planning and decision-making processes both within municipalities, for developers, and in communities.

Establish Common Language:
Public life data provides a clear communication tool when discussing projects across multiple sectors and with different stakeholders across the globe.

Evaluation Tool:
Public life data success criteria enable continued evaluation of projects and processes, ensuring iteration based on actual project performance and user needs.

Driver for Change:
Public life data helps frame calls for action that can eventually lead to meaningful change within cities, towards more people-centric cities.

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DATA TABLES DESCRIBED BY THE PROTOCOL

blue text = required field/table
grey text = optional field/table

FIRST LEVEL METADATA
An agency keeps one "agency" table containing its key attributes. This table should always be packaged with the data whenever the data is shared outside of the agency's internal database.

AGENCY

agency_id *(unique identifier)*
agency_name
agency_department
agency_phone
agency_email
agency_language
agency_type

An agency stores this information once and packages it with each individual study. The table may be updated in instances where any of these attributes change. Consistency is strongly encouraged.

SECOND LEVEL METADATA
Each individual public life study undertaken within an agency is described in the "study" table. The table should help define the project's overall parameters.

STUDY

agency_id *(unique identifier)*
study_id *(unique identifier)*
study_title
study_project
study_project_phase
study_start_date
study_end_date
study_scale
study_areas
study_manager_name
study_manager_email
study_protocol_version
study_notes

A study undertaken by an agency is connected to this series of attributes that set the context of the study in both space and time.
The table will help locate specific projects within an agency by any of the outlined attributes. All "study" tables must specify the publisher of the study and which version of the specification the study refers to.

LOCATION DATA
An agency keeps one "location" table of all its study locations at all times. Additional attributes may be assigned to a location, depending on whether the location is defined as a line or an area.

LOCATIONS

agency_id *(unique identifier)*
location_id *(unique identifier)*
location_country
location_region
location_city
location_geometry
location_type
location_name_primary
location_name_secondary
location_subdivision
location_character

An agency keeps one table with all the geographic locations that the agency has ever surveyed, both line and area geometries. This table may be updated to add new locations, whenever new locations are created.
If the geometry is a line, further attributes may be assigned in the table "location_line".
If the geometry is an area, further attributes may be assigned in the table "location_area".

LOCATION_LINE

location_id *(unique identifier)*
line_date_measured
line_total_m
line_pedestrian_m
line_bicycle_m
line_vehicular_m
line_typology_pedestrian
line_typology_bicycle
line_typology_vehicular

This table adds specific and detailed attributes to a line-geometry. These spatial characteristics can be updated on a regular basis to reflect, for example, changing pavement widths.
The table should be used to look up locations with specific characteristics, like a commercial street.

LOCATION_AREA

location_id *(unique identifier)*
area_date_measured
area_total_sqm
area_people_sqm
area_typology

This table adds specific and detailed attributes to an area-geometry. These spatial characteristics can be updated on a regular basis to reflect, for example, changing typologies.
The table should be used to look up locations with specific characteristics, like a parks under a certain size.

SURVEY CONTEXT
Each captured survey compontent has to link to a "survey_context" table that provides context for the data's link to time and space.

SURVEY_CONTEXT

study_id *(unique identifier)*
location_id *(unique identifier)*
survey_id *(unique identifier)*
survey_time_start
survey_time_stop
survey_time_character
survey_representation
survey_microclimate
survey_temperature_c
survey_method
survey_surveyor_name
survey_notes

A study will consist of many surveys that take place in different locations and at different times. The "survey" table distinguishes these individual data points from one another.
A "survey" table can link to any number of public life data points. One survey table may relate to both the table "survey_gender" and "survey_age", if these were counted together, or may relate to just a single table, e.g., the "survey_mode".

SURVEY COMPONENTS
A public life survey can consist of any number of survey components, specified by these tables. Each table is based on a nested category structure that can be expanded if the study wishes to reach a higher level of detail.

SURVEY_GENDER

survey_id
row_id
row_total

Suggested Content:
men
women
unknown

SURVEY_AGE

survey_id
row_id
row_total

Suggested Content:
0-14
15-24
25-64
65+

SURVEY_MODE

survey_id
row_id
row_total

Suggested Content:
pedestrian
bicyclist

SURVEY_GROUPS

survey_id
row_id
row_total

Suggested Content:
1
2
3-7
8+

SURVEY_POSTURE

survey_id
row_id
row_total

Suggested Content:
standing
sitting_formal
sitting_informal
lying
multiple

SURVEY_ACTIVITIES

survey_id
row_id
row_total

Suggested Content:
commercial
consuming
cultural
recreative_active
waiting_transfer

SURVEY_OBJECTS

survey_id
row_id
row_total

Suggested Content:
animal_dog
bicycle_helmet

SURVEY_GEOTAG

survey_id
row_id
row_total

Suggested Content:
unique_position

Each of the eight listed public life data components are described in detail in the actual data specification, which also explain the opportunities to expand or collapse a survey's complexity. If several data points have been collected simultaneously, the survey component tables will share a survey_id and a row_id.

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ABOUT
METHODOLOGY CRASH COURSE

STEP-BY-STEP GUIDE
These six steps describe the overall process of using the Public Life Data Protocol to conduct a public life study.

STEP 1: Register your agency

Save your primary agency information in the "agency" table.

You only need to do this once, unless your agency changes its core information, like contact information or purpose, sometime in the future.

STEP 2: Set up your survey locations

Set up the "locations" table with the first sites you want to survey, keeping line and area geometries together.

You can add further details to a street in the "location_line" table, and further details to a place in the "location_area" table. The more details, the more precise you analysis can be.

Whenever you define a new survey location, just add it to this table and keep all your locations in one place!

STEP 3: Define a study

In the "study" table you can outline the scale of the public life study that you are about to conduct, as well as name the specific project manager, and add any notes about whether the study is a singular research project, or perhaps whether it is part of a recurring initiative.

You will have one of these tables for each study you plan and conduct.

STEP 4: Choose your survey components

A public life study can include several survey components, or it can consist of just a single survey component.

You should choose your survey components based on your study questions and the resources you have availabe to collect and manage data; sometimes it is more valuable to collect less and more detailed data, and sometimes you may want to collect a wide range of metrics.

You may choose to link several survey components, to survey several components simultaneously, or to survey several components consecutively. See the paragraph "Linking Surveys" on page 35 for details on these various approaches.

You can read more about the options for collecting more or less granular data for each survey component in the data specification starting on page 09.

GENDER
Applies to people staying and moving

Example Questions:

Do all genders feel equally invited?

Are the planned activities in accordance with the users of the place?

Do gender minorities choose to walk in public at night?

AGE
Applies to people staying and moving

Example Questions:

How many children visit this place?

Do the people on the street match the census data for the area?

Do the elderly have adequate facilities to spend time outside?

MODE
Applies to people moving

Example Questions:

What is the detailed mode-split across a street section?

Is the street of the right width and surface type for the users?

How many people move through the space at night?

GROUPS
Applies to people staying and moving

Example Questions:

How sociable are the people staying within this place?

Does the urban furniture provide opportunities for groups to meet?

Do people need space to walk in pairs?

POSTURE
Applies to people staying

Example Questions:

Do people feel comfortable lying down and sitting within the space?

Are there invitations for people to rest?

How do people use the urban furniture and other elements within the space?

ACTIVITIES
Applies to people staying and moving

Example Questions:

Are people engaged in a single activity or multiple activities?

Are the activities that people spend time doing optional or necessary?

What is the diversity of activities?

OBJECTS
Applies to people staying and moving

Example Questions:

How many of the pedestrians are also walking a dog?

Do people carry their own chairs or blankets into the space?

Are bicyclists wearing helmets?

GEOTAG
Applies to people staying

Example Questions:

Which corners of the space are more popular for people to spend time in?

Are some kinds of urban furniture more popular than others?

What is the impact of shade and sun?

STEP 5: Conduct surveys

Whether you are collecting data in person on the street, or using some kind of automation (e.g., motion sensors), the data you collect will be linked to a "survey_context" table.

This table describes the exact timeframe within which the data was collected, it links to the right location from the "locations" table, and it gives you the opportunity to make notes about special occasions that may have impacted your data.

Every single data point is linked to a survey context table.

STEP 6: Organise, analyse, and share your data

When you have collected all the survey data belonging to a study, you can package the raw data as a csv file and share it online with other public life enthusiasts. Remember to include the metadata so the study can always be traced back to you.

This may help you get in touch with people who have similar research goals or challenges as yourself, and you will be providing a valuable contribution to the public life movement.

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SPECIFICATION

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Project Responsible: Shin-pei Tsay (Gehl Institute) / Project Manager: Camilla S. Andersen (Gehl)
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SPECIFICATION

METADATA / AGENCY BACKGROUND INFORMATION

TABLE: "AGENCY"

CONTENT: The table contains metadata describing the background information of the agency conducting the study. The table should only be filled in once per agency.

REQUIRED: Yes.

FIELD NAME	FIELD DESCRIPTION	DATA TYPE	CONTENT STRUCTURE	RECOMMENDATIONS	EXAMPLE
● agency_id	Unique identifier. Links files/tables together.	integer	n/a	Can be generated by computer/database, but can also be made manually. The ID is either numeric or alphanumeric. The ID must be unique within the database.	a. 1 b. USA_Gehl_Institute c. (computer-generated ID)
● agency_name	Full name of the agency that is conducting/posting the study.	string	n/a	Write the name of the agency as it is officially registered. Capitalize the first letter of all nouns, pronouns, verbs, adjectives, subordinating conjunctions, and sometimes conjunctions. Prepositions are only capitalized it they are used adjectivally or adverbially. Do not use special characters.	a. City of San Francisco b. Gehl Institute Inc.
agency_department	Specific department within the agency that is responsible for the study. Leave blank, if no such specification is necessary.	string	n/a	Write the name of the department as it is officially registered. Capitalize the first letter of all nouns, pronouns, verbs, adjectives, subordinating conjunctions, and sometimes conjunctions. Prepositions are only capitalized it they are used adjectivally or adverbially. Do not use special characters.	a. Urban Planning Department b. null
agency_phone	Direct single voice telephone number for the specified agency.	string	n/a	Write the agency's telephone number as a string value. The number should contain punctuation marks to group the digits of number. Include the country calling code in brackets at the beginning of the telephone number. Use the preposition "0" rather than the character "+".	a. "(01) 123.456.7891" b. "(0045) 1234.5678"
● agency_email	Single valid email address actively monitored by the agency's reception or inquiry desk.	string	n/a	Write the entire email in lower case. "(:at)" can be used instead of the character "@" if preferred.	a. city@email.com b. agency(:at)ngo.com
agency_language	Main language used by the agency posting the study. Leave blank, if only British English is used to fill in the study.	string	n/a	Specify the main language used by the agency to complete this study, besides the Protocol's specified language (British English). Use only one alternate language to British English. If any other variation of English is used (like United States English) this must also be specified to enable cross-country queries. Alternative languages to British English are typically used for notes and strings.	a. English (United States) b. Danish c. null
agency_type	Character of the type of agency that is conducting/posting the study.	string	"governmental agency" "municipal agency" "non profit corporation" "business corporation" "community organisation" "educational institute" "private individual" List should be exhaustive and must not contain duplicates.	Only one attribute can be selected per agency. Pick the type that is the best fit. If the agency's type is not listed in the Protocol, please suggest adding an additional category in the official Protocol development forum (initially hosted by Gehl Institute).	a. "municipal agency" b. "non profit corporation"

blue dot ● = required field
grey text and box = unique identifier

end.

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SPECIFICATION
METADATA / SETTING THE STUDY CONTEXT

TABLE: "STUDY"

CONTENT: The table contains second-level metadata that sets the context of the overall study. The table should be filled in once per study.

REQUIRED: Yes.

FIELD NAME	FIELD DESCRIPTION	DATA TYPE	CONTENT STRUCTURE	RECOMMENDATIONS	EXAMPLE
● agency_id	Unique identifier. Used to link files/tables together.	integer	n/a	Can be generated by computer/database, but can also be made manually. The ID is either numeric or alphanumeric. The ID must be unique within the database.	a. 1 b. USA_Gehl_Institute c. (computer-generated ID)
● study_id	Unique identifier. Used to link files/tables together.	integer	n/a	Can be generated by computer/database, but can also be made manually. The ID is either numeric or alphanumeric. The ID must be unique within the database.	a. 1 b. NY_2017_1 c. (computer-generated ID)
study_title	Title or name of the study as given by the conducting agency.	string	n/a	Consider giving the study an indicative name that makes it easy to look up in the future, or to find by people who have not been directly involved with the study. The name could consist of a date and a site, or it can be completely arbitrary.	a. Study 1 b. San Francisco PSPL 2017 c. Vesterbrogade Development 2017-2019
study_project	Title or name of the project that the study is part of. Leave blank if the study is not linked to any other project.	string	n/a	If the study is linked to a series of studies or if it is part of a larger project or initiative, this information can be indicated within this field. Avoid abbreviations and informal language. The field may be used as an alternative to the field "study_title".	a. Pavement to Parks b. Annual Community study c. Lincoln Road Pilot 2017
study_project_phase	Project phase or stage at the time of the study. Leave blank if the study is not linked ot any other project.	string	n/a	This field can be used to indicate whether a study is part of a pre-, during-, or post-implementation study of a project.	a. Phase 1 b. Post Implementation c. Baseline Study
study_start_date	Date of the first survey taking place within a study.	date	yyyymmdd	Specify the approximate timeframe of the entire study from the date the first count is conducted. If the first count takes place on a Wednesday, the Monday of that week can be specified as the start date of the study to indicate a study timeframe of e.g. two full weeks.	a. 20170415
study_end_date	The date of the last survey taking place within a study.	date	yyyymmdd	Specify the approximate timeframe of the entire study from the date the last count is conducted. If the last study takes place on a Saturday, the Sunday of that week can be specified as the end date of that study to indicate a study timeframe of e.g. two full weeks.	a. 20170418
study_scale	Approximate scale of the entire study area, irregardless of the amount of survey locations within that study area.	string	"district" "city" "city centre" "neighbourhood" "block scale" "single site" List should be exhaustive and must not contain duplicates.	Choose the scale that best describes the geographical scope of the study. Defined categories: "District": an area that includes both a city center and its vicinities. "Greater London" would be considered a district, whereas "London" would be considered a city. "City": an area within the municipal boundaries of the city, as defined by that city's municipal agencies. "Seattle" would be considered a city. "City Centre": an area defined as the centre of the city, either officially by the city's municipal agencies, or unofficially through colloquial speech. "Downtown Denver" would be considered a city centre. "Neighbourhood": a named or clearly defined area within a city that is not considered the city centre. Neighbourhoods typically comprise several blocks and their boundaries can vary from official election boundaries. "Meatpacking District" would be considered a neighbourhood. "Block Scale": an area comprising one or several blocks within the city, but which do not make up an entire neighbourhood. "2nd to 3rd Avenue between 5th and 8th St" would be considered a block scale. "Single Site": an area defining a single location, typically a plaza or one stretch of street. "Union Square" would be considered a single site. If the identified scale of the study is not listed, please request making an addition to the official Protocol development forum (currently hosted by Gehl Institute)	a. "city centre" b. "neighbourhood"
study_areas	Area geometries for surveys bundles together within one larger study. Leave blank if no such sub-division is necessary.	JSON	Geography component of the GeoJSON specification.	The study areas can be used to specify e.g. if multiple neighbourhoods were surveyed together within the overall study. This categorisation can be useful in the data analysis and comparison phase of the project. Must be JSON, cannot be KML or Shapefile. Use for example open source www.geojson.io, or other free open tools. Use WSG84/CRS4326.	a. {"geometry": { "type": "LineString","coordinates": [[-73.98920238018036, 40.74316432553873], [-73.98907899856567,40.74314400397063]]]}
● study_manager_name	Name of the person in charge of the study.	string	Name_Surname_title	Write the name of the person in charge of organising and carrying out the entire study. If more people have been in charge, specify the person that can best be contacted and queried about the content of the study.	a. John_Smith_urban planner b. Sandy_Jones_community representative
study_manager_email	Direct email to the person in charge of the study.	string	n/a	Specify the contact information of the person that has been in charge of organising and carrying out the study. If no email exists, a phone number can be provided instead, also within this field.	a. jsmith@urbanplanning.sf b. sandy123@email.com
● study_protocol_version	Version of the Public Life Data Protocol that the study is written in.	string	"BETA" "#.#"	Specify the Public Life Data Protocol version used to conduct or publish the study. If the data has been converted from another format, indicate this in the field "study_notes", and indicate the Protocol version that the data has been converted to within this field. Keep up to date with new versions of the Protocol in the official Protocol forum (initially hosted by Gehl Institute).	a. BETA b. 2.1
study_notes	Notes that regard the entirety of the study.	string	n/a	The notes should help to frame the context of the study, both its goals and potential challenges that are relevant to interpreting the data correctly. The notes section can also be used to indicate whether the data was converted from another format. Notes may be written in the agency's chosen language.	a. This study was conducted as a test and will be followed up by a second study soon. Check for updated versions. b. We conducted this study as an experiment with new volunteers. Some volunteers have indicated in their notes that they might have misunderstood some categories. Look out for this when using the data.

blue dot ● = required field

grey text and box = unique identifier

end.

Founded by Gehl Institute with Gehl, City of San Francisco, and Copenhagen Municipality
Tested, iterated, and refined by Gehl Institute with Gehl, City of San Francisco, Copenhagen Municipality, and Seattle DOT

Public Life Data Protocol
Version: BETA / September 27 2017

SPECIFICATION
DESCRIBING THE SURVEY LOCATIONS

TABLE: "LOCATIONS"

CONTENT: The table contains information about all the locations ever surveyed by an agency, whether intended for surveying people moving (line geometry) or people staying (area geometry.

REQUIRED: Yes.

FIELD NAME	FIELD DESCRIPTION	DATA TYPE	CONTENT STRUCTURE	RECOMMENDATIONS	EXAMPLE
agency_id	Unique identifier. Used to link files/tables together.	integer	n/a	Can be generated by computer/database, but can also be made manually. The ID is either numeric or alphanumeric. The ID must be unique within the database.	a. 1 b. NY_2017_1 c. (computer-generated ID)
location_id	Unique identifier. Used to link files/tables together.	integer	n/a	Can be generated by computer/database, but can also be made manually. The ID is either numeric or alphanumeric. The ID must be unique within the database.	a. 1 b. Broadway_3A c. (computer-generated ID)
location_country	Country that the survey location is based within.	string	n/a	An agency may have a database/list of locations within multiple countries. A survey location can only be based within one country, but a study may comprise survey locations from multiple countries. Do not use abbreviations (e.g. DK for Denmark).	a. United States of America b. Denmark c. United Kingdom
location_region	State, county, or municipal boundary of the location.	string	n/a	Listing the regions will help distinguish between places that have the same name, and which are located within the same country. Do not use abbreviations (e.g. CA for California).	a. California b. Nordjylland c. Lincolnshire
location_city	Name of the city that the survey location is based within. Leave blank if the survey location is not based within a city.	string	n/a	Write the city's full name as it is officially registered. If the location exists outside of a city, fill in the "location_region" field instead, and write "null" in the value of this field. Capitalise the first letter of all nouns, pronouns, verbs, adjectives, subordinating conjunctions, and sometimes conjunctions. Prepositions are only capitalised if they are used adjectivally or adverbially. Do not use special characters. Do not use abbreviations.	a. San Francisco b. Aalborg c. Lincoln
location_geometry	Line or Polygon that describes the geometry of the location.	JSON	Geography component of the GeoJSON specification.	Locations that survey people moving are indicated with a line geometry that runs perpendicular to the flow of people. Locations that survey people staying are indicated with an area geometry that defines the boundaries for people to stay within. The geometry must describe exactly the line or area surveyed. If a street or a public square has been subdivided to ease the collection process, a location geometry must be created for each individual subdivision. Further specifications may be given in the field "location_subdivision". The value must be JSON. It cannot be KML or Shapefile. Use for example open source www.geojson.io, or any other free open tools. Use the coordinate system WSG84/CRS4326.	a. {"geometry": { "type": "LineString","coordinates": [[-73.98920238018036, 40.74316432553873], [-73.98907899856567,40.74314400397063]]}
location_type	Indication of whether the location is intended for counts of people moving (across a line), or whether it is intended for counts of people staying (within an area).	string	"line" "area"	Choose "line" if the location is a line geometry, surveying people moving. Choose "area" if the location is an area geometry, surveying people staying. The value of this field cannot be null.	a. "line" b. "area"
location_name_primary	Official, specific name of the survey location.	string	n/a	Write the name that the location is officially recognised by. This will typically be the name of a street or a plaza. Capitalise the first letter of all nouns, pronouns, verbs, adjectives, subordinating conjunctions, and sometimes conjunctions. Prepositions are only capitalized it they are used adjectivally or adverbially. Avoid special characters, including apostrophise and period markers.	a. Union Square b. Vesterbrogade c. Regent Street d. Market Street
location_name_secondary	Secondary or specifying name of the survey location. Leave blank if no specification is necessary.	string	n/a	Use this field as best suits the context of the survey location. Specify the nearest cross street, a famous building next to the location, the block number, street number, or any other type of secondary information that help specify the location without the use of coordinates. Consider what information will be useful for external readers of the data to locate the survey location without the use of coordinates. Consider what information will be useful if more survey locations are created in close proximity.	a. North b. by Tivoli c. block 3000 d. number 345
location_subdivision	Line Geometry: indication of whether the line is a subdivision of a single survey location. Area Geometry: indication of whether an area is a subdivision of a single survey location.	string	null "north" "north-east" "east" "south-east" "south" "south-west" "west" "north-west" "centre"	This field is meant to be used to indicate if a street or a plaza is not surveyed in its entirety. If a street is not surveyed from facade to facade, but rather from facade to the centre-line of the street, then the location is considered to be subdivided into e.g. north and south. If a plaza is not surveyed along its official boundaries, but split into four smaller boundaries, then the location is considered to be subdivided into e.g. north, south, east, and west. Indicate whether the survey line/area has been subdivided into two or more surveys, using the geographical orientation of the location. Subdivision may be considered in places that are very busy, or which have very different uses across a line or area. Choose your orientation based on the closest alignment with due north, +/- a 45 degree angle. Example: if the street/plaza is oriented towards N-NW, register the street/plaza either on the N/S axis or the NW/SE axis. If the entirety of a line/area is surveyed, then the field value is null.	a. null b. "centre" c. "south"

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Public Life Data Protocol
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SPECIFICATION

TABLE: "LOCATIONS"

... continued

location_character	Primary character of the survey location's immediate surroundings.	string	"commercial" "CBD" "civic" "cultural" "educational" "industrial" "infrastructural" "medical" "mixed" "office" "recreational" "residential" "rural" "stadium" *List should be exhaustive and must not contain duplicates.*	Only one category can be assigned per survey line or area. Choose the category that best describes the location on a normal day when no special activities take place. Defined categories: "commercial": high density of commercial establishments, like shops and restaurants, or high density of informal commercial activity, like market stalls and food carts. Also applies to malls. "CBD": Central Business District, mixes offices, commercial activity, and infrastructural arteries. "civic": strong presence of public and civic functions, like libraries, churches, or municipal buildings. "cultural": strong presence of cultural functions, like theatres and museums. "educational": character is dominated by an educational institution, like a university campus. "industrial": high density of heavier industry, presence of warehouses, storage spaces, and buildings sites. "infrastructural": dominated by the need to move goods, people, and vehicles between other destinations, like a central artery or a station area. "medical": many or large facilities for medical practice, typically a hospital campus. "mixed": equal mix of retail, residences, and office space. "office": primarily office buildings with limited presence of residential buildings and shops. "recreational": high presence of nature, open space, recreational activities, like a path through a park or along a playground. "residential": high density of residential buildings, few commercial activities, no business or industry. "rural": low density of buildings, high density of nature and agriculture. "sport": predominantly assigned for sports activities, typically a stadium or a large football field. If the identified character of the location is not listed, please suggest making an addition to the official Protocol development forum (currently hosted by Gehl Institute)	a. "recreational" b. "CBD" c. "commercial"

blue dot ● = required field

grey text and box = unique identifier

end.

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Public Life Data Protocol
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SPECIFICATION

DETAILS FOR LINE-GEOMETRY LOCATIONS

TABLE: "LOCATION_LINE"

CONTENT: The table contains additional location information that is unique to line geometries (surveying people moving).

REQUIRED: No.

FIELD NAME	FIELD DESCRIPTION	DATA TYPE	CONTENT STRUCTURE	RECOMMENDATIONS	EXAMPLE
● location_id	Unique identifier. Used to link files/tables together.	integer	n/a	Can be generated by computer/database, but can also be made manually. The ID is either numeric or alphanumeric. The ID must be unique within the database.	a. 1￼b. Broadway￼c. (computer-generated ID)
● line_date_measured	Date that the location_line attributes were measured.	date	yyyymmdd	Register this information in case the attributes change over time, like if a pavement is extended from one study to the next. A location may generate a history of changes over time that can be correlated with the public life data.	a. 20170607
line_total_m	Total width of the street/space that the line geometry intersects.	numeric	[meter]	Measure across the lenght of the line geometry. This information may be derived from the location_geometry field.￼￼If the space cannot be measured from facade to facade or within the right-of-way, as may be the case with forest paths or paths across city squares, measure the width of the path that the line geometry intersect, which will also be the same as the width assigned for pedestrians.￼￼Use no less than two decimal points.	a. 32.55￼b. 24.97
line_pedestrian_m	Width of the pedestrian area on the street/space that the line geometry intersects.	numeric	[meter]	Measure the width of pedestrian footpaths, pavements, etc. Do not include space assigned along buildings for café furniture, signage, etc., nor space at the edge of the street assigned for street lamps, fire posts, bins, etc. The value must represent the usable pedestrian space, also if the pedestrian space is shared with other modes of transport.￼￼Use no less than two decimal points.	a. 6.34￼b. 24.97
line_bicycle_m	Width of the bicycle area that the line geometry intersects.	numeric	[meter]	Measure the width of the bicycle lane, path, route, etc. Only measure space that is specifically assigned to cyclists, i.e. not areas that are shared with vehicular traffic. On shared surface roads that allow bicycling, measure the navigable area.￼If the line geometry does not intersect any areas assigned for bicycling, the field value=0.￼￼Use no less than two decimal points.	a. 4.50￼b. 0.00
line_vehicular_m	Width of the vehicular area that the line geometry intersects.	numeric	[meter]	Measure the width of the vehicular lanes from curb to curb, including areas assigned for parking or for bicycling, if the bicycling space is shared with moving traffic. On shared surface roads, measure the drivable area even if this is shared with pedestrians.￼If the line geometry does not intersect any areas assigned for bicycling, the field value=0.￼￼Use no less than two decimal points.	a. 18.45￼b. 24.97
line_typology_pedestrian	Typology of the space assigned for pedestrians that the line geometry intersects.	string	null￼"pedestrian only"￼"pedestrian priority"￼"wide pavements"￼"narrow pavements"￼"no pavements"￼￼*This list is suggestive.*	Choose the category that best describes the conditions at the survey location.￼An agency may choose to use the terminology most commonly used within the agency, city, or country of the location.￼￼If no pedestrian areas exist, the value is null.	
line_typology_bicycle	Typology of the space assigned for bicycles that the line geometry intersects.	string	*null*￼"protected"￼"buffered"￼"raised"￼"shared with motorized traffic"￼"shared with public transport"￼"shared with pedestrians"￼"greenway"￼"signed only"￼￼*This list is suggestive.*	Choose the category that best describes the conditions at the survey location.￼An agency may choose to use the terminology most commonly used within the agency, city, or country of the location.￼￼If no bicycle lane exists, the value is null.	a. "protected"￼b. null
line_typology_vehicular	Typology of the space assigned for vehicles that the line geometry intersects.	string	*null*￼"transit only"￼"shared surface"￼"one-way traffic"￼"two-way traffic"￼"boulevard"￼"alley"￼"waterway"￼￼*This list is suggestive.*	Choose the category that best describes the conditions at the survey location. An agency may choose to use the terminology most commonly used within the agency, city, or country of the location.￼￼Defined categories:￼￼"pedestrian only": designated primarily to pedestrians. Bicycle traffic may be allowed, as may vehicular service traffic at designated times of the day.￼￼"transit only": designated primarily to pedestrians and to public transit. Bicycles or other soft modes of transportation may be allowed.￼￼"shared surface": shared equally between pedestrians and any form of vehicular traffic. Can also be shared with other modes of transport.￼￼"one-way traffic": designated one-way vehicular traffic lane(s). Maximum of two travel lanes, otherwise categorise as boulevard.￼￼"two-way traffic": vehicular traffic lanes designated to moving in both directions. Maximum of four travel lanes, otherwise categorise as boulevard.￼￼"boulevard": multi-lane arterial thoroughfare, often divided with a median down the centre.￼￼"alley": narrow passageway between or behind buildings.￼￼"waterway": river, canal, or other route for travel by water.	a. "pedestrian only"￼b. "boulevard"

blue dot ● = required field

grey text and box = unique identifier

end.

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Public Life Data Protocol
Version: BETA / September 27 2017

SPECIFICATION
CATEGORIES FOR TABLE: "LOCATION_LINE"

INSPIRATION FOR CATEGORIES WITHIN THE FIELD: "LINE_TYPOLOGY_BICYCLE"

- Several examples of bicycle lane typologies were collected from a range of established organisations to define the suggested list of typologies for line geometries. The categories in the field "line_typology_bicycle" are derived from these, and other, sources.
- An agency may choose to use a type of categorisation that is already established within the organisation, city, or country that the study takes place in. The Protocol development team welcomes submissions of alternative standards to make the suggestive list within the Protocol as holistic as possible.

NYC DOT

standard	A standard bike line is located between a vehicle lane and the parking line.
curb side	Painted directly next to a curb on the side of a street without parking.
protected path	Painted between the curb and a lane of parked cars or a jersey barrier
pedestrian plaza	Bike lane painted along the edge of a pedestrian plaza.

NACTO

conventional bike lanes	Bike lanes designate an exclusive space for bicyclists through the use of pavement markings and signage. The bike lane is located adjacent to motor vehicle travel lanes and flows in the same direction as motor vehicle traffic.
buffered bike lanes	Buffered bike lanes are conventional bicycle lanes paired with a designated buffer space separating the bicycle lane from the adjacent motor vehicle travel lane and/or parking lane. A buffered bike lane is allowed as per MUTCD guidelines for buffered preferential lanes (MUTCD section 3D-01).
contra-flow bike lanes	Contra-flow bicycle lanes are bicycle lanes designed to allow bicyclists to ride in the opposite direction of motor vehicle traffic. They convert a one-way traffic street into a two-way street: one direction for motor vehicles and bikes, and the other for bikes only.
left-side bike lanes	Left-side bike lanes are conventional bike lanes placed on the left side of one-way streets or two-way median divided streets. Left-side bike lanes offer advantages along streets with heavy delivery or transit use, frequent parking turnover on the right side, or other potential conflicts.

CALIFORNIA DOT

shared roadway	No bikeway designation, or a recommended 4-foot paved roadway shoulder with a standard 4 inch edge line.
class I bikeway	Bike path. Should be used to serve corridors not served by streets and highways or where wide right of way exists, permitting such facilities to be constructed away from the influence of parallel streets.
class II bikeway	Bike lane. Established along streets in corridors where there is significant bicycle demand, and where there are distinct needs that can be served by them.
class III bikeway	Bike route. Shared facilities which serve either to provide continuity to other bicycle facilities, or to designate preferred routes through high demand corridors.
class VI bikeway	Seperated bikeways. A bikeway for the exclusive use of bicycles and includes a sparation required between the separated bikeway and the through vehicular traffic.

end.

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SPECIFICATION
CATEGORIES FOR TABLE: "LOCATION_LINE"

INSPIRATION FOR CATEGORIES WITHIN THE FIELD: "LINE_TYPOLOGY_VEHICULAR"

- Several examples of street typologies were collected from a range of established organisations to define the suggested list of typologies for line geometries. The categories in the field "line_typology_vehicular" are derived from these, and other, sources.
- An agency may choose to use a type of categorisation that is already established within the organisation, city, or country that the study takes place in. The Protocol development team welcomes submissions of alternative standards to make the suggestive list within the Protocol as holistic as possible.

SF BETTER STREETS

downtown commercial streets
commercial throughways
neighbourhood commercial streets
downtown residential streets
residential throughways
neighbourhood residential streets
industrial streets
mixed-use streets
parkways
park edge streets
park interior
multi-way boulevard
ceremonial (civic) streets
alleys
shared public ways
pedestrian-only streets

OPEN STREET MAPS

aerial way
waterway
highway
main road
commercial street
residential street
footway
alley
avenue
arterial street
cul-de-sac
dirt road
gravel road
lane
parkway
freeway

NACTO: GLOBAL STREETS DESIGN GUIDE

pedestrian-only streets
laneways and alleys
parklets
pedestrian plazas
commercial shared streets
residential shared streets
residential streets
neighbourhood main streets
central one-way streets
central two-way streets
transit streets
large streets with transit
grand streets
elevated structure improvements
elevated structure removal
streets to streams
temporary street closures
post-industrial revitalization
waterfront and parkside streets
historic streets
streets in informal areas

NACTO: URBAN STREET DESIGN GUIDE

aerial way
waterway
highway
main road
commercial street
residential street
footway
alley
avenue
arterial street
cul-de-sac
dirt road
gravel road

end.

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SPECIFICATION
DETAILS FOR AREA-GEOMETRY LOCATIONS

TABLE: "LOCATION_AREA"
CONTENT: The table contains additional location information that is unique to area geometries (surveying people staying).
REQUIRED: No.

FIELD NAME	FIELD DESCRIPTION	DATA TYPE	CONTENT STRUCTURE	RECOMMENDATIONS	EXAMPLE
• location_id	Unique identifier. Used to link files/tables together.	integer	n/a	Can be generated by computer/database, but can also be made manually. The ID is either numeric or alphanumeric. The ID must be unique within the database.	a. 1￼b. Broadway￼c. (computer-generated ID)
• area_date_measured	Date that the location_area attributes were measured.	date	yyyymmdd	Register this information in case the attributes change over time, e.g. if a plaza is turned into a park, or if the dimensions of the space assigned for people change.￼A location may generate a history of changes over time that can be correlated with the public life data.	a. 20170607
area_total_sqm	Total area of the space defined by the area geometry.	numeric	[square meter]	Measure the total area encompassed by the perimeter that define the survey location. This information may be derived from the location_geometry field.￼Use no less than two decimal points.	a. 109.65￼b. 1245.54
area_people_sqm	Area of the space defined by the geometry that is inhabitable and assigned for stationary activities.	numeric	[square meter]	Measure the total area assigned for stationary activities where stationary activities can also take place. Do not include areas that are assigned for vehicular traffic, parking, flower beds, decorative fountains, etc.￼Use no less than two decimal points.	a. 109.65￼b. 940.44
area_typology	Typology of the space defined within the area geometry.	numeric	"Park"￼"Square"￼"Station"￼"Street"￼"Community"￼"Water"￼This list is suggestive.	Choose the category that best describes the survey location. An agency may choose to use the terminology most commonly applied within the agency, city, or country of the location.￼Only one attribute can be assigned per area geometry.	a. "park"￼b. "station_regional"

blue dot • = required field
grey text and box = unique identifier

end.

SUBCATEGORIES FOR THE FIELD: "AREA_TYPOLOGY"
- A more detailed or nuanced typology of an area may be indicated by using one of these listed subcategories.
- An agency may also choose to use a type of categorisation that is already established within the organisation, city, or country that the study takes place in.
  In this case, the Protocol development team welcomes suggestions and submissions of alternative standards.

CATEGORY	SUB CATEGORIES	DESCRIPTION
Park	Pocket	Also known as a parkette or mini-park. Pocket parks are frequently created on a single vacant building lot or on small, irregular pieces of land. Are typically only used by immediate neighbours or passersby.
	Local	Serves an entire neighbourhood or even a couple of neighbourhoods. Is rarely visited by tourists.
	Civic	Serves all of a city. People might travel to visit it, both lcoally and globally (tourists). Typically this type of park will be adjacent to a civic building or it will be centered around a monument.
	Commons	A cultural or natural destination accessible to all members of society, including natural materials such as air, water, and a habitable earth. Not privately owned.
Square	Pocket	A small hard-surfaced space. Typically created on a single vacant building lot or on small, irregular pieces of land. Are typically only used by immediate neighbours or passersbys.
	Local	Serves an entire neighbourhood or even a couple of neighbourhoods. Is rarely visited by tourists.
	Commercial	A hard-surfaced space that is surrounded by a considerable density of commercial activity, like shops, restaurants, etc. Can also be a square that is used for markets.
	Civic	A hard-surfaced space serving an entire community. Is typically also visited by tourists, both local and global.
	Temporary	Has been created temporarily either to be taken away after a shorter period of time to to be replaced by a permanent design after a shorter period of time.
Station	Local	Serving a neighbourhood, like a local bus stop or light rail station.
	Regional	Serving a region, like a regional bus stop, a commuter train station, or a ferry harbour.
	National	Serves travellers the entire country, typically a train station.
	International	Serves global travellers, typically an airport or an international harbour.
Street	Block	An area bounded by facades on either side and by street crossings at either end.
	Parklet	A parklet is a sidewalk extension that provides more space and amenities for people using the street. Usually parklets are installed on parking lanes and use several parking spaces.
	Alley	A narrow passageway between or behind buildings, bounded by building walls and the official street edges/right-of-way.
Community	Cemetary	Also graveyard, churchyard, burial ground, memorial garden. An area set apart for containing graces, tombs, or funeral urns.
	Recreation	A community area for recreation that is neither a park, a street, or a square. Can be a local exercise site, like a basketball court.
	Playground	A space containing ample invitations for especially childrens' play, typically involving swingsets, slides, or sandboxes.
	Schoolyard	Open to the general public even outside of school hours. Can embody both areas for recreation and a playground, but should be categorised by the ownership.
	Garden	A single piece for land gardened collectively by a group of people. Flowers, plants, and vegetables grow here, tended by the local community.
Water	Beach	Typically larger areas with a soft groundcover of sand or pebbles. Is bounded by a large body of water, either the sea or a lake.
	Riverfront	A hard-surfaced space next to a flowing body of water.
	Lakefront	A hard-surfaced space next to a still body of water.
	Harbour	A place on the coast where vessels may find shelter, especially protected from rough water by artificial structures. Identified and distinguished from other water-related typologies by the definite presence of sailing activity, but by being in and of itself landbased (unlike a pier).
	Pier	A platform supported on pillars or girders leading out from the shore into a body of water. Sometimes used as a landing stage for boats.

end.

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Public Life Data Protocol
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SPECIFICATION
DESCRIBING A SURVEY COMPONENT'S TIME AND PLACE

TABLE: "SURVEY_CONTEXT"
CONTENT: The table contains information about the specific location, time, and context for a single survey.
REQUIRED: Yes.

FIELD NAME	FIELD DESCRIPTION	DATA TYPE	CONTENT STRUCTURE	RECOMMENDATIONS	EXAMPLE
study_id	Unique identifier. Used to link files/tables together.	integer	n/a	Can be generated by computer/database, but can also be made manually. The ID is either numeric or alphanumeric. The ID must be unique within the database.	a. 1 b. NY_2017_1 c. (computer-generated ID)
location_id	Unique identifier. Used to link files/tables together.	integer	n/a	Can be generated by computer/database, but can also be made manually. The ID is either numeric or alphanumeric. The ID must be unique within the database.	a. 1 b. Broadway c. (computer-generated ID)
survey_id	Unique identifier. Used to link files/tables together.	integer	n/a	Can be generated by computer/database, but can also be made manually. The ID is either numeric or alphanumeric. The ID must be unique within the database.	a. 1 b. Saturday_08 c. (computer-generated ID)
survey_time_start	Exact date and time that the survey count started.	date:time	yyyymmdd:hhmm	Write the exact time the survey count starts. The precision should be on the minute, but it does not have to be on the hour. A survey count may start at 13:03 and run until e.g. 13:23. If the survey is conducted in person, a tolerance of +/- 5 minutes is allowable for the exact start time. However, the length of the count, indicated by time_stop, must be accurate on the minute. See further description in the field "survey_time_stop". Use military terminology, e.g. 1300 instead of 1pm or 01:00. Use local time.	a. 20170601:1330
survey_time_stop	Exact date and time that the survey count stopped. Surveys of moving people should be no less than ten minutes in length. Surveys of stationary people should be snapshots in time.	date:time	yyyymmdd:hhmm	Write the exact time the survey count stops. This should be exactly on the minute, but it does not have to be on the hour. It is very important that the total length of your counts, whether it was 10 minutes, 13 minutes, or 60 minutes, is accurately represented between time_start and time_stop, as the data may be used to extrapolate hourly or daily averages. Use military terminology, e.g. 1300 instead of 1pm or 01:00. Use local time. Surveys of moving people: The difference between time_start and time_stop should not be less than 10 minutes for any type of location. For low density locations, the the survey count should be conducted for an even longer period of time to collect a representative sample. The survey length can vary from location to location, or from hour to hour, within a study, depending on the density of people. Surveys of stationary people: Area surveys aim to be "snapshots" of the public life taking place in a space, and are therefore not as time-specific as the counts of moving people. However, it may still take a little while to register all the people staying in a place at one time. Therefore, the difference between time_start and time_stop should not be more than 5 minutes for smaller, less busy places, and not be more than 20 minutes for larger, busier places. If the survey count takes too long, consider limiting the survey components per timeframe, or subdivide the survey area into smaller areas. Surveys can have different timeframes and sometimes a survey can start and stop within the same minute if the area has no people or few people staying within it. See guidelines for studying public life on gehlinstitute.org for more information.	a. 20170601:1345
survey_time_character	Indicate if anything out of the ordinary took place at the specific time of the survey count that may have impacted the results.	string	null "cultural/communal event" "political/religious activity" "commercial event" "national/local holiday" "accident/emergency" "roadwork/construction" List is non-exhaustive. Duplicates are not allowed.	Use the suggested list of special events to indicate whether any unique activities may have impacted the specific survey count. The list may be expanded to cover new contexts and needs, but duplicates or near-duplicates should be avoided. Defined categories: "cultural/communal event": music performance, block party, street artists, etc. "political/religious activity": rallies, demonstrations, public preaching, etc. "commercial event": flea market, temporary food trucks, street vendors, etc. "national/local holiday": bank holidays, or locally recognized days off from either school or work. "accident/emergency": car crash, fire, illness, etc. "roadwork/construction": street ruptures, noise, diversions, etc.	a. "cultural/communal event" b. "commercial event"
survey_representation	Indicate whether the data collected represents at total of the people present within the survey count time, or a representative sample.	string	"absolute" "relative"	Surveys of line geometries/moving people: - Pick "absolute" if the data represents the total amount of people that have passed by within the survey timeframe. Otherwise, pick "relative". Surveys of area geometries/stationary people: - Pick "absolute" if the data represents the total amount of people within the survey location, otherwise pick "relative." Field cannot be null.	a. "absolute" b. "relative"
survey_microclimate	Perceived whether condition on the specific survey location.	string	"Sun - Exposed" "Sun - Shaded" "Light Clouds" "Heavy Clouds" "Light Rain" "Heavy Rain" "Fog" "Light Wind" "Heavy Wind" "Thunder" "Light Snow" "Heavy Snow" List is suggestive.	Indicate the weather conditions for the survey count. This field will always be a subjective indication based on the context of the study and the interpretation of the surveyor. This data is used to interpret very local microclimate conditions that may not be noticeable by weather-monitoring entities. The weather condition is not dependant on the temperature. Alternatively, weather data can be accessed retrospectively from online meteorological sources.	a. "Light Clouds" b. "Heavy Wind"

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SPECIFICATION
TABLE: "SURVEY_CONTEXT"

... continued

survey_temperature_c	Official temperature measured in the survey location at the time of the survey count.	integer	[celsius]	Write the temperature as it was officially recorded in the survey location at the time of the survey count. This data may be accessed and entered retrospectively from online meteorological sources. Negative numbers are indicated with a "-". Use no less than one decimal.	a. 25.0 b. -2.5
● **survey_method**	Description of the survey count method.	string	"analogue" "video" "motion sensor" "pressure sensor" "Wi-Fi signal" "GPS" "radar" "cell tower" "digital application" "drone" "road tubes" *List should be exhaustive.* *Duplicates are not allowed.*	Only one attribute can be selected per survey count, but a full study may comprise survey counts that are gathered using multiple methods. If a desired method is not listed, please make a suggestion to the official Protocol development forum (initiatlly hosted by Gehl Institute)	a. "analogue" b. "Wi-Fi signal"
survey_surveyor_name	Name of the person conducting the survey count, if the survey_method is noted as analogue. Leave blank if no surveyor was involved in the survey count.	string	n/a	Write the name of the person that conducted the survey count. If the data was collected digitally, omit this field. Capitalise the first letter of all nouns, pronouns, verbs, adjectives, subordinating conjunctions, and sometimes conjunctions. Prepositions are only capitalised it they are used adjectivally or adverbially. Avoid special characters, including apostrophise and period markers.	a. John Smith b. Julia Stone
survey_notes	Comments that may serve to clarify the content of the survey count.	string	n/a	Use clear and concise language. All languages are permissible, but if an alternative language to British English is used, this should be indicated in the field "agency_language".	a. There was a cloudburst for about two minutes of my fifteen minute count. b. Jeg så en masse skolebørn på den anden side af gaden og jeg er ikke sikker på at jeg fik talt dem alle sammen. C. The sensor may have erred within the hour of the survey count due to a district-wide Wi-Fi outage.

blue dot ● = required field
grey text and box = unique identifier

end.

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SPECIFICATION
SURVEY COMPONENT: PERCEIVED GENDER

TABLE: "SURVEY_GENDER"

CONTENT: The table contains information about the observed and perceived gender of people moving through or staying in a public space.

REQUIRED: No.

OPTIONAL CATEGORIES: All categories should be included. Subcategories are only available via intercept studies.

ATTRIBUTES/PERSON: A person can only be assigned one attribute, and no person may be assigned zero attributes.

NOTE: Studies are advised to support gender observational data with intercept surveys to gain more nuanced gender-related insights.

FIELD NAME	FIELD DESCRIPTION	DATA TYPE	CONTENT STRUCTURE	RECOMMENDATIONS	EXAMPLE	
● survey_id	Unique identifier. Links files/tables together.	integer	n/a	Can be generated by computer/database, but can also be made manually. The ID is either numeric or alphanumeric. The ID must be unique within the database.	a. 1 b. Saturday_08 c. (computer-generated ID)	
● row_id	Unique identifier for each row of people surveyed. Links simultaneous counts of different components.	integer	n/a	Should be a natural sequence of integers, counting from 1. The row_id is used to link together different attributes collected about the same person/group of people.	a. 1 b. 2 c. (computer-generated ID)	
● row_total	Indicate the number of people assigned by the row_id. This field is not an ID, but it should be included with every survey.	integer	n/a	Indicates how many people were counted within the row. If each person is counted separately, the field value will be 1. If a group of people are counted together, the field value may be any integer from 1-… If all people are counted together, the field value is also equal to the total number of people surveyed within a time span.	a. 1 b. 257	
men	People who are perceived by surveyors as men or boys.	integer	n/a	The content of this table is based on several country census tracts. The survey count is exclusive; one person can only have one attribute. Please note: Assuming gender based on observation is always approximate and inevitably results in cases of mis-gendering. Consider supplementing this survey with an intercept survey in which individuals can self-report their gender identity.	n/a	all categories
women	People who are perceived by surveyors as women or girls.					
unknown	People who are perceived by surveyors as non-binary or whom the surveyors do not feel comfortable assuming the gender of. Infants and toddlers may fall in this category.					

blue dot ● = required field
grey text and box = unique identifier

end.

CATEGORY SELECTION FOR TABLE "SURVEY_GENDER"

● The gender table has been created based on selected country census tracts. More census tracts may be added for comparison in future versions.

CATEGORY	COUNTRY CENSUS				
	AU	UK	DK	US	ARG
Men	Men	Men	Men	Men	Men
Women	Women	Women	Women	Women	Women
Unknown	-	-	-	-	-

NOTES ON GENDER/SEXUAL ORIENTATION:

Examples of official census representation of sexual orientation, regardless of physical gender:

The US does not ask sexual orientation in official census (U.S. Census Bureau).

The UK surveys sexual orientation in official Census (Office for National Statistics). Categories: Heterosexual/Straight, Gay/Lesbian, Bisexual, Other, Do not Know/Refuse

Denmark does not survey sexual orientation in official census (Danmarks Statistik)

Australia surveys sexual orientation in official census (Australian Bureau of Statistics). Categories: Heterosexual, Gay, Lesbian, Bisexual

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SPECIFICATION

SURVEY COMPONENT: PERCEIVED AGE

TABLE: "SURVEY_AGE"

CONTENT: The table contains information about the observed and perceived age of people moving through or staying in a public space.

REQUIRED: No.

OPTIONAL CATEGORIES: All categories should be included. Subcategories may substitute one or all main categories.

ATTRIBUTES/PERSON: A person can only be assigned one attribute, and no person may be assigned zero attributes.

NOTE: Studies are advised to support age observational data with intercept surveys to gain more nuanced age-related insights.

FIELD NAME	FIELD DESCRIPTION	DATA TYPE	CONTENT STRUCTURE	RECOMMENDATIONS	EXAMPLE
● survey_id	Unique identifier. Links files/tables together.	integer	n/a	Can be generated by computer/database, but can also be made manually. The ID is either numeric or alphanumeric. The ID must be unique within the database.	a. 1 b. Saturday_08 c. (computer-generated ID)
● row_id	Unique identifier for each row of people surveyed. Links simultaneous counts of different components.	integer	n/a	Should be a natural sequence of integers, counting from 1. The row_id is used to link together different attributes collected about the same person/group of people.	a. 1 b. 2 c. (computer-generated ID)
● row_total	Indicate the number of people assigned by the row_id. This field is not an ID, but it should be included with every survey.	integer	n/a	Indicates how many people were counted within the row. If each person is counted separately, the field value will be 1. If a group of people are counted together, the field value may be any integer from 1-... If all people are counted together, the field value is also equal to the total number of people surveyed within a time span.	a. 1 b. 257
0-14	Infancy and childhood	integer	n/a	Several tiers are available based on local census tracts and study complexity. The recommended tier for medium-to-high density locations is described here. Count is exclusive. One person can only have one attribute.	n/a
15-24	Adolescence and early adulthood				
25-64	Adulthood				
65+	Late adulthood				

minimum categories

blue dot ● = required field
grey text and box = unique identifier

end.

SUBCATEGORIES FOR THE TABLE "SURVEY_AGE"

- The age table has been created based on various country census tracts. More census tracts may be added for comparison in future versions.
- The minimum, medium, and maximum tiers have been identified to enable the broadest comparisons of data across the studied national boundaries.
- In most studies, the "minimum" category can be used. The "medium" and "maximum" categories should only be used in unique locations (like a playground), or to meet a unique study purpose. The category levels can also be combined to create nuances within some, but not all, age groups.

CATEGORY			TERM	DESCRIPTION	REFERENCE COUNTRY CENSUS					
MINIMUM	MEDIUM	MAXIMUM			AU	UK	DK	US 1	US 2	ARG
0-14	0-4	0-4	Infants and Toddlers / Infancy	Will often be carried. May walk intermittently with heavy assistance.	0-4			0-4	0-4	0-4
	5-14	5-9	Preschoolers / Early Childhood	Most walk on their own, but require some assistance. May be in kindergarten or daycare.	5-9	0-14	0-14		5-9	5-9
		10-14	General School / Preadolescence / Late Childhood	Mandatory/primary school age in most countries. Most walk on their own without assistance.	10-14			5-17	10-14	10-14
15-24	15-24	15-17	Teens / Adolescense	End of mandatory school age. High school, college, or work age. Pre-voting, pre-drinking, and pre-driving age in most countries.	15-19	15-24	15-24		15-19	15-24
		18-24	Early Adulthood / Young Adults	Higher education age or beginning of work life in most countries. Drinking and driving age in most countries.	20-24			18-24	20-24	
25-64	25-44	25-34	Early Adulthood / Adulthood	Early family life for some.	25-29	25-44	25-44	25-44	25-29	25-44
		35-44	Adulthood	Typically mid-career and settled with family.	30-44				30-44	
	44-64	45-54	Adults / Middle Age / Midlife	Typically mid-career with children of school age.	45-54	45-64	45-64	45-64	45-54	45-64
		55-64	Mature Adulthood	Late-career. Children might have moved out or are enrolled in higher education.	55-64				45-64	
65+	65-74	65-74	Young Senior / Late Adulthood	End of working life. May still be very active and agile.	65-74	65-74	65-79	65+	65-74	65-74
	75+	75+	Mature Senior / Long-lived	Agility is diminished and walking might be assisted.	75+	75+	80+		75+	75+

end.

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SPECIFICATION

SURVEY COMPONENT: MOVING MODE

TABLE: "SURVEY_MODE"

CONTENT: The table contains information about the mode of transportation used by people moving through a public space. The table is intended to study soft modes of transportation.

REQUIRED: No.

LIMITS: The table cannot contain information about people who are stationary.

OPTIONAL CATEGORIES: All categories are optional, but the chosen categories must be represented in their entireties, i.e. include all subcategories within the chosen main category.

ATTRIBUTES/PERSON: A person can only be assigned one attribute, but may be assigned zero attributes.

FIELD NAME	FIELD DESCRIPTION	DATA TYPE	CONTENT STRUCTURE	RECOMMENDATIONS	EXAMPLE
● survey_id	Unique identifier. Links files/tables together.	integer	n/a	Can be generated by computer/database, but can also be made manually. The ID is either numeric or alphanumeric. The ID must be unique within the database.	a. 1 b. Saturday_08 c. (computer-generated ID)
● row_id	Unique identifier for each row of people surveyed. Links simultaneous counts of different components.	integer	n/a	Should be a natural sequence of integers, counting from 1. The row_id is used to link together different attributes collected about the same person/group of people.	a. 1 b. 2 c. (computer-generated ID)
● row_total	Indicate the number of people assigned by the row_id. This field is not an ID, but it should be included with every survey.	integer	n/a	Indicates how many people were counted within the row. If each person is counted separately, the field value will be 1. If a group of people are counted together, the field value may be any integer from 1-... If all people are counted together, the field value is also equal to the total number of people surveyed within a time span.	a. 1 b. 257
pedestrian	Person walking or running. Person using a wheelchair or other types of support. Person who is carried, e.g. in a stroller or on someone's back. Person rolling on a light conveyance, like a skateboard.	integer	n/a	This count can only be applied to line locations, surveying people moving. Several tiers are available. The preferred tier for high density locations with a focus on pedestrians and bicyclists is described here. Counts are exclusive. One person can only have one attribute.	n/a
bicyclist	People riding on any type of bicycle, both chauffeur and passenger.				

(right margin: suggested categories)

blue dot ● = required field
grey text and box = unique identifier

end.

See additional categories and subcategories on the next page.

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SPECIFICATION
CATEGORIES FOR TABLE: "SURVEY_MODE"

ADDITIONAL CATEGORIES AND SUBCATEGORIES FOR MODE OF MOVING

- The categories have been created based on an analysis of the many ways people move through space, focusing on the softer modes (foot and bike).
- A public life study typically measures pedestrians and bicyclists. In low-density locations, these categories may be subdivided into their subcategories to collect a greater level of detail. The other listed categories should only be included in a unique study context or to meet a unique study purpose. A survey may also mix the different levels of categories.

CATEGORY	SUBCATEGORY	ADVANCED	CONTENT	DESCRIPTION
pedestrian	walking	-	strolling	Pedestrian walking leisurely with intermittent stops.
			average pace	Pedestrian walking at an average human walking pace.
			brisk	Pedestrian walking briskly and determined without looking anywhere but ahead.
			other	Any other type of walking that does not fall in any other category.
	running	-	jogging	Pedestrian running at an average or leisurely pace.
			sprinting	Pedestrian running determined and at a pace that is too fast to notice the surroundings.
			skipping	Pedestrian running with a skipping step.
			other	Any other type of running that does not fall in any other category.
	supported	lightly	rollator	Pedestrian walking with light support, typically from an object or an animal, to overcome any type of perceived mobility impairment or disability.
			walking cane	
			guide cane	
			long cane	
			cart	
			crutches	
			guide dog	
			other	
		heavily	wheelchair_manual	Pedestrian moving with heavy support, typically from a wheelchair, to overcome any type of perceived mobility impairment or disability.
			wheelchair_electric	
			wheelchair_pushed	
			other	
	carried	wheels	stroller	Pedestrian being moved by other people in objects on wheels who is not perceived to be subject to any mobility impairments or disability. Typically children in strollers or prams.
			pram	
			cart	
			other	
		body	arms	Pedestrian being carried on the body of another person who is not perceived to be subject to any mobility impairment or disability. Typically children being held by their parents.
			sling	
			carrier	
			back	
			other	
	rolling	manual	scooter	Pedestrian moving by an optional, light, manual vehicle with wheels.
			skateboard	
			rollerblades	
			heelies	
			longboard	
		powered	moped	Pedestrian moving by an optional, light, powered vehicle with wheels.
			skateboard	
			uniwheel	
			segway	
bicyclist	private_individual	manual	normal	Bicyclist moving on an individual, manual bicycle that is privately owned or used in a private errand. If two people are riding on a bicycle intended for individual use, they are both counted in this category.
			shared	
			unicycle	
			recumbent	
			other	
		powered	normal	Bicyclist moving on an individual, powered bicycle that is privately owned or used in a private errand. If two people are riding on a bicycle intended for individual use, they are both counted in this category.
			shared	
			unicycle	
			recumbent	
			other	
	private_multiple	passenger	cargo bike	Bicyclist moving as a passenger on a bicycle intended to carry more than one person at a time in a private errand. If several people are passengers, all are counted within this category. Can be divided into manual or powered if necessary.
			tandem	
			social/multiple seats	
			other	
		chauffeur	cargo bike	Bicyclist moving as a chauffeur on a bicycle intended to carry more than one person at a time in a private errand. If no passenger is moving with the chauffeur, the chauffeur is still counted in this category. Can be divided into manual or powered if necessary.
			tandem	
			social/multiple seats	
			other	
	commercial_individual	manual	normal	Bicyclist moving on an individual, manual bicycle in a commercial errand, delivering either light loads (typically carried on the bike rack), or heavy loads (typically carried in a special cargo box).
			cargo	
		powered	normal	Bicyclist moving on an individual, powered bicycle in a commercial errand, delivering either light loads (typically carried on the bike rack), or heavy loads (typically carried in a special cargo box).
			cargo	
	commercial_multiple	passenger	pedicab	Bicyclist moving as a passenger on a bicycle intended to carry more than one person at a time in a commercial errand, recognised by the transaction of money or goods to be carried by the vehicle. If several people are passengers, all are counted within this category. Can be divided into manual or powered if necessary.
			rickshaw	
			social/multiple seats	
			other	
		chauffeur	pedicab	Bicyclist moving as a chauffeur on a bicycle intended to carry more than one person at a time in a commercial errand, recognised by the transaction of money or goods to take on a passenger. If no passenger is moving with the chauffeur, the chauffeur is still counted in this category. Can be divided into manual or powered if necessary.
			rickshaw	
			social/multiple seats	
			other	

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SPECIFICATION
CATEGORIES FOR TABLE: "SURVEY_MODE"

... continued

categories below this line should only be included in very specific contexts

Category	Mode	Sub-mode	Items	Description
(people moving by) **animal**	riding	-	horse / camel / donkey / elephant / other	Person who is being carried on the back of an animal.
	carriage	-	horse / camel / donkey / elephant / dogs / other	Person who is being moved or carried by an animal, but who is not sitting on the animal's back.
(people moving in) **snow**	manual	-	skis / snowboard / sled / other	Person moving in snow using specific snow equipment.
	powered	-	snowmobile / other	Person moving in snow using powered snow equipment.
(people moving by) **water**	no_vessel	-	swimming / floating / other	Person who is moving by human power within the water.
	small_vessel	manual	canoe / kayak / pedalo / gondola / row / surfboard / other	Person who is moving in a small vessel that can be moved using manpower.
		wind	windsurf / kitesurf / dinghy / other	Person who is moving in a small vessel that is primarily moved by the wind.
		powered	scooter / jetskis / other	Person who is moving in a small vessel that needs to be powered.
	medium_vessel	wind	sailboat / other	Person who is moving in a medium-sized vessel that is primarily moved by the wind.
		powered_private	motorboat / hovercraft / yacht / other	Person who is moving in a medium-sized vessel that is private and primarily moved by an outside power source like a motor.
		powered_commercial	cargo / tourism / taxi / fishing / other	Person who is moving in a medium-sized vessel that is powered and which has a commercial function, either by transporting people for money or by working on the vessel.
		powered_public	bus / other	Person who is moved by a public transportation vessel that is seaborne.
	large_vessel	wind	ship / other	Person moving on a large wind-powered ship or other.
		powered_private	yacht / other	Person moving on a large privately owned motorised vessel.
		powered_commercial	freight / tourism / other	Person moving on a large motorised vessel with a primary commercial function.
		powered_public	ferry / other	Person moving on a large motorised vessel that is publicly owned, like a large public ferry.
(people moving in) **vehicles**	private	light	motorcycle / automobile	Person moving in heavy motorised vehicle. All people within the vehicle must be counted.
		heavy	van / truck	
	commercial	light	taxi / rideshare	Person moving in a commercial vehicle, like a taxi. All people within the vehicle must be counted.
		heavy	truck	
	public	-	bus / train / monorail / lightrail	Person moving in a public vehicle, like a bus. All people within the vehicle must be counted.

end.

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SPECIFICATION

SURVEY COMPONENT: POSTURE IN SPACE

TABLE: "SURVEY_POSTURE"

CONTENT: The table contains information about the physical posture of people staying in a space at a specific point in time.

REQUIRED: No.

LIMITS: The table cannot contain information about people who are moving through a space.

OPTIONAL CATEGORIES: All categories must be included, but the choice to include subcategories for one or several categories is optional.

ATTRIBUTES/PERSON: A person can only be assigned one attribute, and no person may be assigned zero attributes.

	FIELD NAME	FIELD DESCRIPTION	DATA TYPE	CONTENT STRUCTURE	RECOMMENDATIONS	EXAMPLE
●	survey_id	Unique identifier. Links files/tables together.	integer	n/a	Can be generated by computer/database, but can also be made manually. The ID is either numeric or alphanumeric. The ID must be unique within the database.	a. 1 b. Saturday_08 c. (computer-generated ID)
●	row_id	Unique identifier for each row of people surveyed. Links simultaneous counts of different components.	integer	n/a	Should be a natural sequence of integers, counting from 1. The row_id is used to link together different attributes collected about the same person/group of people.	a. 1 b. 2 c. (computer-generated ID)
●	row_total	Indicate the number of people assigned by the row_id. This field is not an ID, but it should be included with every survey.	integer	n/a	Indicates how many people were counted within the row. If each person is counted separately, the field value will be 1. If a group of people are counted together, the field value may be any integer from 1-... If all people are counted together, the field value is also equal to the total number of people surveyed within a time span.	a. 1 b. 257
	standing	People standing or leaning.				
	sitting_formal	People sitting on objects designated for seating.			This count can only be applied to area locations, surveying people staying.	
	sitting_informal	People sitting on objects that are not designated for seating, e.g. on the ground or on the step of a stair.	integer	n/a	Counts are exclusive. One person can only have one attribute.	n/a
	lying	People lying down, either on the ground or on any kind of object.			Several tiers are available. The preferred tier for high density area locations is presented here.	
	multiple	People who are staying within a space, but moving around thus inhabiting multiple bodily positions.				

minimum categories

blue dot ● = required field

end.

grey text and box = unique identifier

See subcategories on the next page.

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Public Life Data Protocol
Version: BETA / September 27 2017

SPECIFICATION
CATEGORIES FOR TABLE: "SURVEY_POSTURE"

FULL LIST OF CATEGORIES AND SUBCATEGORIES FOR POSTURE IN SPACE

- The categories have been created by studying the ways people inhabit a physical space.
- The hierarchy between subcategories and the advanced category will be revised for Version 1.0. In this version, the type of ownership takes precedence over whether a seat is movable or fixed for the category "sitting_formal". Some studies may choose to subdivide the category "sitting_formal_public" into its advanced level (fixed/movable) to also capture this information.
- A survey may comprise components from all three level of categories to gain more detailed information within certain categories while leaving others more generic.

CATEGORY	SUBCATEGORY	ADVANCED	CONTENT	DESCRIPTION
standing	-	simple	-	Standing freely in space.
		leaning	lightpole wall car other	Standing while leaning against an object or building, typically in a leisurely way.
sitting_formal	commercial	-	bar cafe restaurant shop other	Sitting on furniture that is owned by a commercial establishment. Sitting is typically accepted after a purchase of goods or food, or with the intent of purchasing goods or food.
	private	residential	bench chair other	Sitting on furniture intended for seating, but which is privately owned, where the right to sit cannot be purchased by an exchange of goods or money. This can be a chair or a bench in someone's front garden, or furniture that people have brought themselves into public space and which they will take with them upon leaving the public space.
		office	chair bench other	Sitting on furniture owned by a company or business, where you have to work at or be a guest with the company to use the seating.
		support	stroller wheelchair walker other	Sitting on objects intended for sitting on, which provide heavy support, like a stroller or a wheelchair.
	public	fixed	bench wall with seats planter with seats step with seat single seat picnic table other	Sitting on an object intended as seating which is fixed, provided for the general public. This will typically be a designated bench, but can also take the shape of other objects which have seating built into them.
		movable	seat planter picnic other	Sitting on a movable object intended as seating, provided for the general public. This will typically be a movable chair, but can also be a light picnic table or a planter with clear seating built into it.
sitting_informal	-	ground	grass sand street other	Sitting in places not primarily designed for seating, like on the ground.
		object	planter table sculpture other	Sitting on objects not designed for seating. Could be a planter without a sitting edge, a sculpture, or other.
		architecture	step wall curb other	Sitting on a piece of architecture that has not been designed for people to sit on, like the steps in front of a building, a small ledge, or other.
lying	-	ground	grass sand street other	Lying down on the ground, most of the surface of the body in contact with the ground.
		furniture	bench recliner hammock other	Lying down on a piece of furniture, most of the surface of the body in contact with the furniture. Applies whether the furniture was intended for seating or not.
multiple	-	light	walking dog gardening other	In multiple postures, due to a light amount of physical activity that makes the person moving within the space where they are staying. This will never account for people that are simply passing through a space, but will include a person walking a dog in circles within the same space.
		heavy	exercising playing other	In multiple postures, due to a heavy amount of physical activity that makes the person moving within the space where they are staying. This will never account for people that are simply passing through a space, but will include a runner who is, for example, circling a fountain within a square.

end.

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Public Life Data Protocol
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SPECIFICATION
SURVEY COMPONENT: ACTIVITY ENGAGEMENT

TABLE: "SURVEY_ACTIVITIES"

CONTENT: The table contains information about the activities undertaken by people moving through or staying in a public space.

REQUIRED: No.

OPTIONAL CATEGORIES: All categories, including subcategories, are optional. It is advised to survey all subcategories within a main category to enable aggregation of the data at its highest level, but due to the complexity of activities in public space, this is not a requirement. The categories listed in the table are recommended as a baseline choice.

ATTRIBUTES/PERSON: A person can be assigned zero or multiple attributes.

FIELD NAME	FIELD DESCRIPTION	DATA TYPE	CONTENT STRUCTURE	RECOMMENDATIONS	EXAMPLE
● survey_id	Unique identifier. Links files/tables together.	integer	n/a	Can be generated by computer/database, but can also be made manually. The ID is either numeric or alphanumeric. The ID must be unique within the database.	a. 1 b. Saturday_08 c. (computer-generated ID)
● row_id	Unique identifier for each row of people surveyed. Links simultaneous counts of different components.	integer	n/a	Should be a natural sequence of integers, counting from 1. The row_id is used to link together different attributes collected about the same person/group of people.	a. 1 b. 2 c. (computer-generated ID)
● row_total	Indicate the number of people assigned by the row_id. This field is not an ID, but it should be included with every survey.	integer	n/a	Indicates how many people were counted within the row. If each person is counted separately, the field value will be 1. If a group of people are counted together, the field value may be any integer from 1-... If all people are counted together, the field value is also equal to the total number of people surveyed within a time span.	a. 1 b. 257
commercial	Commercial activity, both people providing a commercial service and people purchasing or showing interest in a commercial service.	integer	n/a	Several tiers are available. The preferred tier for medium density area locations is presented here. If they survey focuses on people moving (line locations), other activities may be selected. Counts are non-exclusive. One person can have several attributes.	n/a
consuming	Consuming food and beverages, or preparing to consume food or beverages.				
conversing	Conversing with one another.				
cultural	Cultural activities, both people providing a cultural activity (performing) and people participating in or observing a cultural activity.				
recreation_active	Active recreation, play, exercise.				
waiting_transfer	Waiting for transportation at designated waiting areas, both public and private.				

preferred baseline categories

blue dot ● = required field
grey text and box = unique identifier

end.

See additional categories and subcategories on the next page.

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SPECIFICATION
CATEGORIES FOR TABLE: "SURVEY_ACTIVITIES"

ADDITIONAL CATEGORIES AND SUBCATEGORIES FOR ACTIVITIES

- The categories have been created by studying the activities people engage with in public space, and grouping them by character.
- A study may choose to substitute or add categories and subcategories to fit a unique context. All categories should be carefully selected. Studies are not advised to include all categories in one survey.
- Activities that are especially sensitive to the surveyor's interpretation and to specific contexts are marked with an asterisk *. These may also be considered 'negative' or 'problematic' in certain contexts. Studies are always advised to focus first on activities that may be considered 'positive' or 'neutral' within the context of the study.
- A study may add its own category or subcategory if a unique activity is not captured by the defined list. In this case, the study agency is advised to request a formal Protocol edit.

CATEGORY	SUBCATEGORY	ADVANCED/CONTENT	DESCRIPTION
commercial	providing/selling	formal / informal	Selling food or goods in an established/legal (formal) setting or in a self-constructed/illegal (informal) setting. Person doing backend activities related to commercial activities, like a waiter busting tables, a person loading commercial goods, or a person setting up a commercial stall.
	participating	buying / observing	In the process of buying foods and goods. Both the person performing a transaction, and the people queuing are counted as buyers. A person who is participating in a commercial situation, without being either a provider or a buyer/shopper in the moment of the survey, is counted as participating by being an observer. This could be a person browsing the produce at a market stall, but who has not yet committed to making a purchase, either by an exchange of money or by queuing up to making a transaction of money.
consuming	-	eating / drinking / cooking (private) / picnicking / other	Engaged with consuming food or drinks, either by being in the process of preparing for consumption, being mid-consumption, or post-consumption. A person who is cooking food in public for private consumption is counted in this category, while a person cooking food in public to sell is counted in the commercial activity category.
conversing	-	whispering / talking / shouting / other	Conversing with another person at any tone of voice. A person talking on a cell phone should be registered in "electronic_engagement". A person talking to a group, like a preacher, should be registered in "cultural_performing". A person shouting abusively at another person or at no one in particular should be registered in "abusive_behaviour"
cultural	providing/performing	artistic / communal / political / religious / other	Performing or providing a cultural activity of either artistic, communal, political, or religious character. A person who is assisting a cultural performance, like a stage manager, is also counted in this category. An artistic activity could be the creation of a painting, or a musical performance. A communal activity could be to provide an outdoor library function, or a public movie screening. A political activity could be organising or leading a rally, or encouraging a demonstration. In some contexts, a sanctioned charity solicitor is also counted in this category. A religious activity could be reading from a testament or reciting a prayer.
	participating/observing	artistic / communal / political / religious / other	Participating in or observing a cultural activity of either artistic, communal, political, or religious character. An artistic activity could be listening to a street mucisian, or having one's portrait painted by an artist in public. A communal activity could be enjoying the screening of an outdoor movie, or participating in a street event. A political activity could be taking part in a demonstration. In some contexts, a person engaging with a sanctioned charity solicitor is also counted in this category. A religous activity could be listening to a preacher.
disruptive*	aggressive	verbal / physical / other	Displaying abusive behaviour towards another person or to no one in particular. The behaviour can be verbal, physical, or other. The behaviour must be assessed as abusive or highly uncomfortable within the context of the survey location.
	intoxicated	alcohol / drugs / other	Visibly ingesting alcohol or drugs in an unsanctioned context, depending on the survey location. Showing clear signs of uncontrolled intoxication such as slurred speech, unfocused eyes, aggressiveness, etc.
electronic_engagement	introverted	listening (earphones) / conversing / reading/writing/playing / charging device / other	Engaging with technology, electronics, and digital gadgets in an introvert fashion, e.g. listening to audio via headphones, conversing on a phone, or reading/writing/playing/working on a computer. Any digital gadget may be included in this category, including but not limited to watches, phones, tablets, and laptops. A person charging a device is also counted in this category.
	extroverted	playing audio (speakers) / photographing / interacting with surroundings / other	Engaging with technology, electronics, and digital gadgets in an extrovert fashion, e.g. listening to audio via speakers, photographing the surroundings, or interacting with screens in the public realm.
living_public*	sanitising	urinating/defecating / washing/showering / other	Engaged in otherwise private sanitary activities within the public realm. Could be urinating or showering in full or partial visibility of others, in areas that are not designated for these types of activities. This category covers any kind of informal behaviour related to sanitary purposes that do not typically take place in public. A person cleaning up after a dog is not counted in this category.
	encamping	-	Encamping, lying, or sleeping in an undesignated camping/sleeping location, like on the street or in a square. This type of activity is typically associated with homelessness, and can be recognised by the accompaniment of most personal belongings.
recreation_active	exercising	formal	Exercising in designated (formal) sports areas, using designated (formal) public sporting equipment, like fixed basketball net.
		informal	Exercising outside of designated (informal) sports areas, using privately-owned equipment, like a jump rope, or no equipment at all.
	playing	formal	Playing in a designated (formal) play area, or with designated (formal) public play equipment.
		informal	Playing outside of a designated (informal) play area, or playing with privately-owned play equipment. Also a person playing with a dog.
recreation_passive	observing	people/activities / landmarks/buildings / nature/landscapes / other	Actively or intentionally observing other people, activities, landmarks, buildings, nature, landscape, or other.
	playing	cards / board / coins / other	Playing passive, analogue, stationary games, like a board or card game.
	affectionate	kissing / hugging / other	Showing physical affection towards another person.
	reading/writing	newspaper	Reading the physical newspaper.
		book	Reading a physical book.
		notebook	Writing in a physical notebook.
		other	-
	creating	drawing / painting / playing music (not performing) / other	Engaging in a creative activity for personal use or purpose, like creating a drawing or painting, or playing music for one's personal enjoyment. A person being creative with a commercial intention should be registered in the activity category "cultural".
	resting	sleeping / relaxing / hanging out / other	Sleeping, relaxing, or simply hanging out for recreational purposes and in areas designated for resting like a beach, park, or street bench. A person sleeping or relaxing in public may also be registered in the category "living_public", depending on the character of the location and the context of the survey count.

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SPECIFICATION
CATEGORIES FOR TABLE: "SURVEY_ACTIVITIES"

... continued

smoking*	-	cigarette e-cigarette cigar pipe shisha other	Smoking any type of object or substance, whether legal or illegal. Only people visibly smoking should be registered in this category. Some surveys may also categorise people smoking in the activity "abusive_substance" if the person smoking is also influenced by the smoked substance to a degree that may cause other people inconvenience or discomfort. In some contexts, "smoking" may be considered an activity within the category "recreation_passive".
soliciting*	begging	money food substance goods other	Requesting the donation of money, food, substances, or goods without the offer of a return transaction.
	campaigning	providing	Approaching people to request information, money, or goods, in exchange for information, membership, or other. Solicitors can typically be recognised by their uniform or by bearing logos representing their cause. This type of activity can also fall in the category "cultural_providing" as a political activity, if the soliciting is sanctioned within the context of the study.
		participating	Engaging with people that request information, money, or goods, in exchange for information, membership, or other. This type of activity can also fall in the category "cultural_participating" as a political activity, if the soliciting is sanctioned within the context of the study.
	sex work	providing/performing	Requesting money or goods in exchange for services of a sexual nature.
		participating/buying	Buying, or inquiring to buy, sexual services in exchange for money or goods.
waiting_transfer	public	bus_regional bus_BRT bus_local bus_water train_intercity train_tram train_subway ferry other	Waiting for a public transportation alternative, typically at designated waiting zones, by stop signs/indicators, or at stations.
	private	car ferry/boat other	Waiting for a private transportation alternative, typically only recognized if the person is standing at a designated drop-off/pick-up zone that has been assigned to private drop-off/pick-up.
	commercial	car ferry/boat other	Waiting for a commercially run transportation service, like a taxi or rideshare scheme. These activities are typically only recognized if the person is standing in a designated taxi/ride-share zone.
waiting_other	interrupted	intersection midblock other	Waiting for traffic or at a red light, midblock, or other, in order to continue a journey through the space.
	wayfinding	reading map reading screen other	Waiting to find a route or destination, typically recognised by being engaged with reading a physical or digital map, or by looking at a directory. People reading a map on a digital device, may also be registered in the category "electronic_engagement".
working_civic	-	maintenance stewardship security/policing service other	Working to upkeep or take care of the public spaces. Civic maintenance could be fixing potholes, stewarding could be sweeping the street, security/policing could be directing traffic, and service could be helping others directions. People tending their front gardens may also be registered in this category.

end.

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SPECIFICATION

SURVEY COMPONENT: SIZE OF GROUPS

TABLE: "SURVEY_GROUPS"

CONTENT: The table contains information about the size of groups moving through or staying in a public space.

REQUIRED: No.

OPTIONAL CATEGORIES: All categories are optional.

ATTRIBUTES/PERSON: A person can be assigned zero or one attribute.

FIELD NAME	FIELD DESCRIPTION	DATA TYPE	CONTENT STRUCTURE	RECOMMENDATIONS	EXAMPLE
● survey_id	Unique identifier. Links files/tables together.	integer	n/a	Can be generated by computer/database, but can also be made manually. The ID is either numeric or alphanumeric. The ID must be unique within the database.	a. 1 b. Saturday_08 c. (computer-generated ID)
● row_id	Unique identifier for each row of people surveyed. Links simultaneous counts of different components.	integer	n/a	Should be a natural sequence of integers, counting from 1. The row_id is used to link together different attributes collected about the same person/group of people.	a. 1 b. 2 c. (computer-generated ID)
1	Single	integer	n/a	Indicate people that appear to be familiar with one another or who are clearly socializing with one another in the respective group category. If the count is paired with any other type of count that captures the total volume of people, the category "single" can be omitted, assuming that the difference between the amount of people captured in one of the group categories and the total amount of people present in the space equals the amount of people who are in the space on their own. Everyone within a group should be registered in the correct group field. Counts are exclusive. One person can only have one attribute.	n/a
2	Pair				
3-7	Smaller Group				
8+	Crowd				

(all categories)

blue dot ● = required field

grey text and box = unique identifier

end.

NOTES

- The group table has been created by identifying sizes of clusters that impact people's experience and use of space.

- Studies may choose to survey the exact number of people, or to aggregate or subdivide the proposed categories.

- No further guidelines exist at this point.

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SPECIFICATION
SURVEY COMPONENT: CARRIED OBJECTS & ANIMALS

TABLE: "SURVEY_OBJECTS"

CONTENT: The table contains information about the types of objects and animals that people carry while moving through or staying in a public space. Objects that have been left by people (like a bicycle in a bicycle stand) should not be counted in this category as these types of observations belong to a public space survey.

REQUIRED: No.

OPTIONAL CATEGORIES: All categories are optional.

ATTRIBUTES/PERSON: A person can be assigned zero or multiple attributes.

FIELD NAME	FIELD DESCRIPTION	DATA TYPE	CONTENT STRUCTURE	RECOMMENDATIONS	EXAMPLE
● survey_id	Unique identifier. Links files/tables together.	integer	n/a	Can be generated by computer/database, but can also be made manually. The ID is either numeric or alphanumeric. The ID must be unique within the database.	a. 1 b. Saturday_08 c. (computer-generated ID)
● row_id	Unique identifier for each row of people surveyed. Links simultaneous counts of different components.	integer	n/a	Should be a natural sequence of integers, counting from 1. The row_id is used to link together different attributes collected about the same person/group of people.	a. 1 b. 2 c. (computer-generated ID)
● row_total	Indicate the number of people assigned by the row_id. This field is not an ID, but it should be included with every survey.	integer	n/a	Indicates how many people were counted within the row. If each person is counted separately, the field value will be 1. If a group of people are counted together, the field value may be any integer from 1-... If all people are counted together, the field value is also equal to the total number of people surveyed within a time span.	a. 1 b. 257
animal_dog	A person accompanied by a dog.	integer	n/a	Several options are available. A study should only include an object count with a specific intention in mind, e.g. studying how many people walk their dogs, stay in spaces with stroller, or carry bicycle helmets while cycling. Count is not exclusive. One person can have multiple attributes.	n/a

suggested category

blue dot ● = required field

grey text and box = unique identifier

end.

See additional categories and subcategories on the next page.

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SPECIFICATION
CATEGORIES FOR TABLE: "SURVEY_OBJECTS"

SUGGESTED CATEGORIES AND SUBCATEGORIES FOR OBJECTS AND ANIMALS

- The list has been created by studying the types of objects or animals that may be indicative of an errand, function, or need of a person moving through or staying in a public space.
- New objects or animals may be added to befit a unique study context or question. If objects are added to the list, the study agency is advised to request a formal Protocol edit. The list must never contain duplicates, but it does not have to be exhaustive.

CATEGORY	CONTENT
Animal Both on a leash and without.	Dog Service Dog Bird Goat Other
Bag/Belongings Carried by a person. Baggage which is left behind or unattended is not counted.	Rolling Suitcase School Bag Briefcase Grocery Bag Shopping Bag Gym Bag Restaurant Take-Out Other
Clothing_Cultural Symbols Worn or carried by a person.	Niqab Kippah Burqa Temple Robes Tichel Frock Coat Hijab Crucifix Headscarf Turban Other
Clothing_Activity Symbols Worn or carried by a person.	Laboratory Coat (scrubs) Jacket Suit Bathing Suit Bridal Wear Other
Goods Person carrying or delivering goods, typically people moving house or people delivering to a private or commercial establishment.	Private Goods Commercial Goods Private Foods Commercial Foods Other
Equipment_Construction Person carrying equipment that is perceived to be for the use in a construction project, private or commercial.	Ladder Timber Steelwork Other
Equipment_Recreational Person carrying equipment that is perceived to be for recreational use.	Musical Instrument Gardening Equipment Beach Towel Other
Equipment_Sport/Play Person carrying equipment that is perceived to be for use when exercising or playing.	Yoga Mat Ball Sled Hoop Slack Line Other
Protection_Safety A person carrying a bicycle helmet in their hand or while not riding a bike should generally not be counted. The same applies for people's use of other types of safety equipment.	Bike Helmet Construction Helmet Gas Mask Air Filter Other
Protection_Weather Person carrying an object that is intended to protect them or others from weather-related discomfort.	Umbrella Snow Shovel Parasol Other
Furniture Carried, not used. Objects of furniture which are carried for the purpose of use before or after the observation has been made. Can be people bringing a chair into a park.	Stool Chair Folding Table Other
Transportation_Carried If the transportaton aid is being used, the "object" becomes a mode of transport and should be counted in the "mode" category of a moving people survey.	Non-motorised Scooter Skateboard Rollerblades Bicycle Other
Transportation_Stationary If the transportaton aid is used in movement, the "object" becomes a mode of transport and should be counted in the "mode" category of a moving people survey.	Wheelchair Walker Stroller Shopping Cart Other

This list is non-exhaustive. Listed items are suggestive.

end.

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SPECIFICATION

SURVEY COMPONENT: STATIONARY GEOTAG

TABLE: "SURVEY_GEOTAG"

CONTENT: The table contains information about the exact location of people staying in a public space.

REQUIRED: No.

LIMITS: The table cannot contain information about people who are moving through a space.

OPTIONAL CATEGORIES: The table only contains one category.

ATTRIBUTES/PERSON: A person can only be assigned one attribute, and no person may be assigned zero attributes.

FIELD NAME	FIELD DESCRIPTION	DATA TYPE	CONTENT STRUCTURE	RECOMMENDATIONS	EXAMPLE
● survey_id	Unique identifier. Used to link files/tables together.	integer	n/a	Can be generated by computer/database, but can also be made manually. The ID is either numeric or alphanumeric. The ID must be unique within the database.	a. 1 b. Saturday_08 (or any other computer-generated ID)
● row_id	Unique identifier for each row of people surveyed.	integer	n/a	Should be a natural sequence of integers, counting from 1. The row_id is used to link together different attributes collected about the same person/group of people.	a. 1 b. 2 c. (computer-generated ID)
● row_total	Indicate the number of people assigned by the row_id.	integer	n/a	Indicates how many people were counted within the row. If each person is counted separately, the field value will be 1. If a group of people are counted together, the field value may be any integer. If all people are counted together, the field value also equal the total number of people counted.	a. 1 b. 257
unique_position	Point that describes the exact count location of a person in space.	JSON	Geography component of the GeoJSON specification.	Must be JSON, cannot be KML or Shapefile. Use for example open source www.geojson.io, or other free open tools. Use WSG84/CRS4326. Count is exclusive. One person can only have one attribute.	a. {"geometry": { "type": "Point","coordinates": [[-73.98920238018036, 40.74316432553873],]}

all categories

blue dot ● = required field

end.

grey text and box = unique identifier

NOTES

- The geotag information is ideally gathered using digital means in the field. Alternatively, the location of a person can be plotted on a physical map whilst conducting the survey, and entered into a coordinate system retrospectively.
- No futher guidelines exist at this point.

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BACKGROUND

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BACKGROUND
SUGGESTED DATA STRUCTURE

EXAMPLE OF LINKING TOGETHER THE DATA TABLES
The agency, study, and location tables are metadata. The public life survey data is stored in separate tables, linked by the row_id and the survey_id.
Other data structures are currently under interrogation and may be proposed in later versions of the Protocol. Suggestions are welcome.
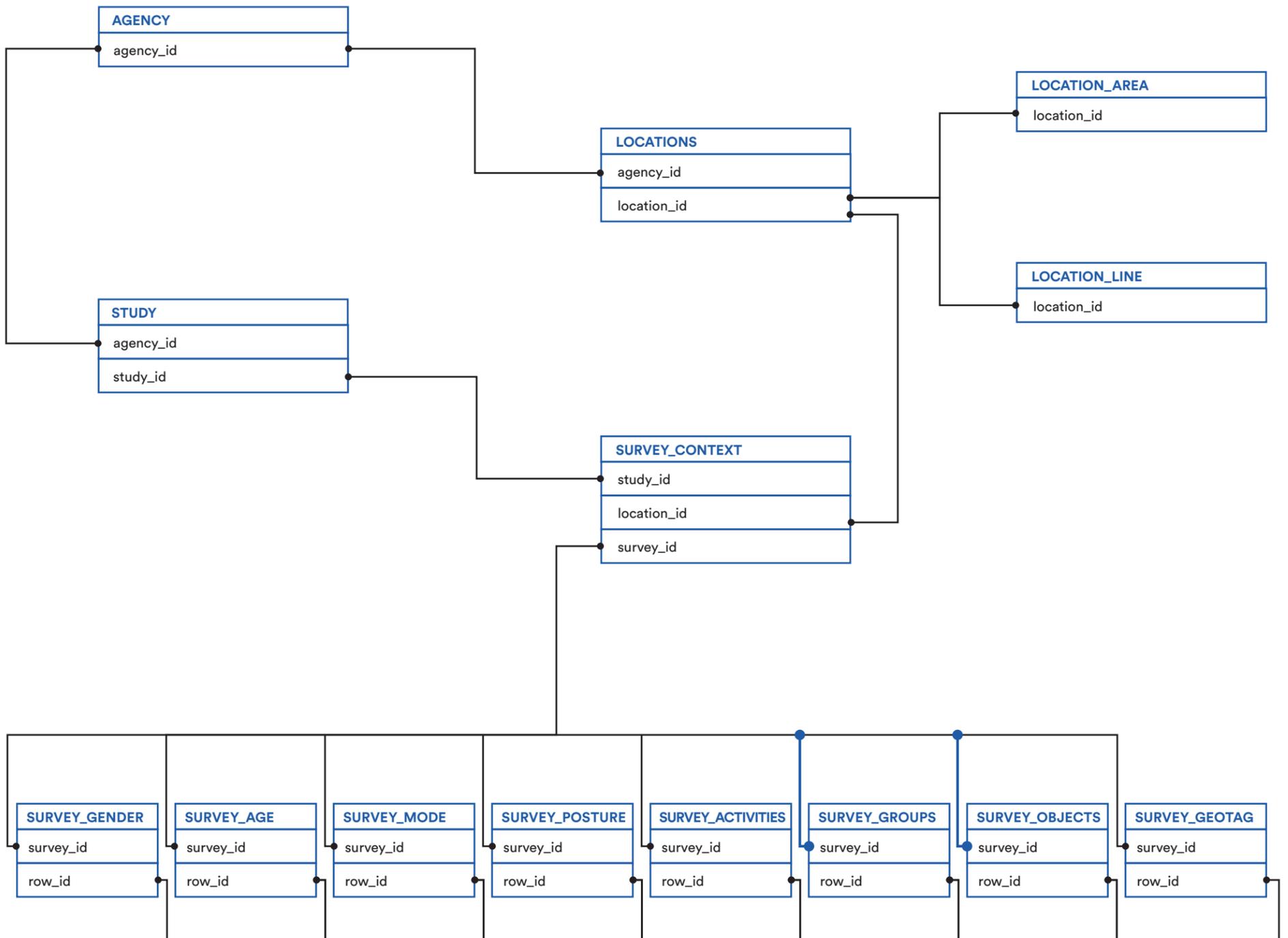
LINKING COUNTS
Several survey components can be collected either as linked data, un-linked but simultaneous data, or un-linked and consecutive data. The choice of method should depend on the study's research questions, the capabilities of the surveyors, and the complexity of the study location and general context.

Linked Surveys

If any number of survey components are measured together, e.g., gender and age, then the data will share a row_id and a survey_id.

This will enable the analysis to state: "In location X at time Y, there were 54 women aged 25-64 in the space.

Simultaneous Surveys

If the survey components are collected simultaneously, but not linked, then the data will share a survey_id, but not a row_id.

This will enable the analysis to state: "In location X at time Y, there were 54 women and 110 people aged 25-64 in the space."

Consecutive Surveys

If several survey components are collected consecutively, but not at the same time, the data will not share either a row_id or a survey_id.

This will enable the analysis to state: "In location X at time Y, there were 54 women in the space. In location X at time Z, there were 112 people aged 25-64."

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BACKGROUND
FILE REQUIREMENTS AND TERMINOLOGY

FILE REQUIREMENTS
The following requirements apply to the format and contents of all files in a published Public Life Data Protocol (PLDP) feed.

- All files in a PLPD survey must be saved as comma-delimited text (CSV).

- The first line of each file must contain field names (see vocabulary).

- All field names are case-sensitive.

- Field values may not contain tabs, carriage returns, or new lines.

- Consistent with the way Microsoft Excel software outputs comma-delimited (CSV) files, quotation marks or commas must be enclosed within quotation marks. In addition, each quotation mark in the field value must be preceded with a quotation mark.

- Field values must not contain HTML tags, comments, or escape sequences.

- Remove any extra spaces between fields or field names. Many parsers consider the spaces to be part of the value, which may cause errors.

- All tables must contain the appropriate unique identifiers (unique data set) to ensure their internal relational system remains intact.

- All Unique ID's must be truly unique within an agency's system.

- Files should be encoded in UTF-8 to support all Unicode characters. This is especially important when exporting from Excel, or other closed-software programs.

- Zip the files in each single study publication.

TERM DEFINITIONS
This section defines terms that are used throughout the Protocol.

- **(Survey) Area:** An "area" indicates the boundaries that people staying have to be within in order to be registered within the survey. People moving across an area are not registered in a stationary count, but people moving within the confounds of the area are. Also known as "location area" or "survey area". Not to be confused with a "study area", which identifies a cluster of "survey areas". A "study area" may be an entire city, while the specific "survey areas" are the public spaces within that city where specific observations will take place.

- **Field:** The fields identify the values within each data table. Each field holds a single piece of data belonging to the table it is located within. Many fields make up a record. Some fields are indicated as optional.

- **(Survey) Line:** A "line" indicates the threshold that people moving have to cross, walking in either direction, to be registered within the survey. Lines typically run from facade to facade across the width of a street, capturing anyone that moves up and down the street. Also known as "Location Line" or "Line Geometry".

- **Optional Field:** The field column may be omitted from your feed, but the Protocol recommends including all relevant columns. You may always include an empty string as a value for records that do not have values for the column.

- **Public Life:** The Protocol defines "public life" as social activities in public space, everyday life in the public realm, and civic life.

- **Public Space:** The Protocol defines "public space" as any space that is located between buildings, and which is publicly accessible. Public space typically consists of streets, parks, and plazas, but can also comprise indoor spaces like the lobby of a public library. Also known as "Public Realm".

- **Required Field:** The field column must be included in the dataset, and a value must be provided. Some required fields permit an empty string as the value (null). "0" is interpreted as a value, and is not an empty string. Please see the field definitions for details.

- **Study:** A public life/space study is any exercise that measures, quantifies, qualifies, or observes any activities related to public life/space. The term "study" is used to describe the entire process, which may consist of several individual surveys.

- **Survey:** A public life/space survey is a specific exercise that measures, quantifies, qualifies, or observes any actvities related to public life/space. The term "survey" is used to describe a singular process, and can be considered part of a larger study.

- **(Data) Table:** The data tables cluster the necessary and optional fields into categories that relate to each other via Unique IDs. Some data tables contain metadata, some are mandatory, and some are optional.

- **Unique IDs:** A unique identifier is a numeric or alphanumeric string that is associated with a single entity within the Protocol table. For example, if a location is assigned the ID "1A", then no other location within the same table may use that same ID. ID's may be identical across different tables.

Please contribute suggestions for further additions to the terminology list that may improve the reading and understanding of the Protocol.

Founded by Gehl Institute with Gehl, City of San Francisco, and Copenhagen Municipality
Tested, iterated, and refined by Gehl Institute with Gehl, City of San Francisco, Copenhagen Municipality, and Seattle DOT

Public Life Data Protocol
Version: BETA / September 27 2017

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Please contribute suggestions, comments and input to Gehl Institute.
Stay tuned for more supporting materials, data feeds, and future iterations of the Protocol.

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