



What is it and why do we do it?

“The concept is simple: with a sensor in combination with a low-cost computer and software, anyone can count the traffic in his or her street. And with this measurement data, an individual citizen or a group of citizens can contact the local or regional government”.

A European project that enables citizens to initiate a policy-making process with fully automated measurement data in the field of mobility and air quality



Dublin

 September 2020  Traffic and pollution  200



Ljubljana

 September 2020  Cycling  200



Cardiff

 September 2020  Air quality & traffic  200



Madrid and Barcelona

 May 2020  Air quality & traffic  200



Leuven

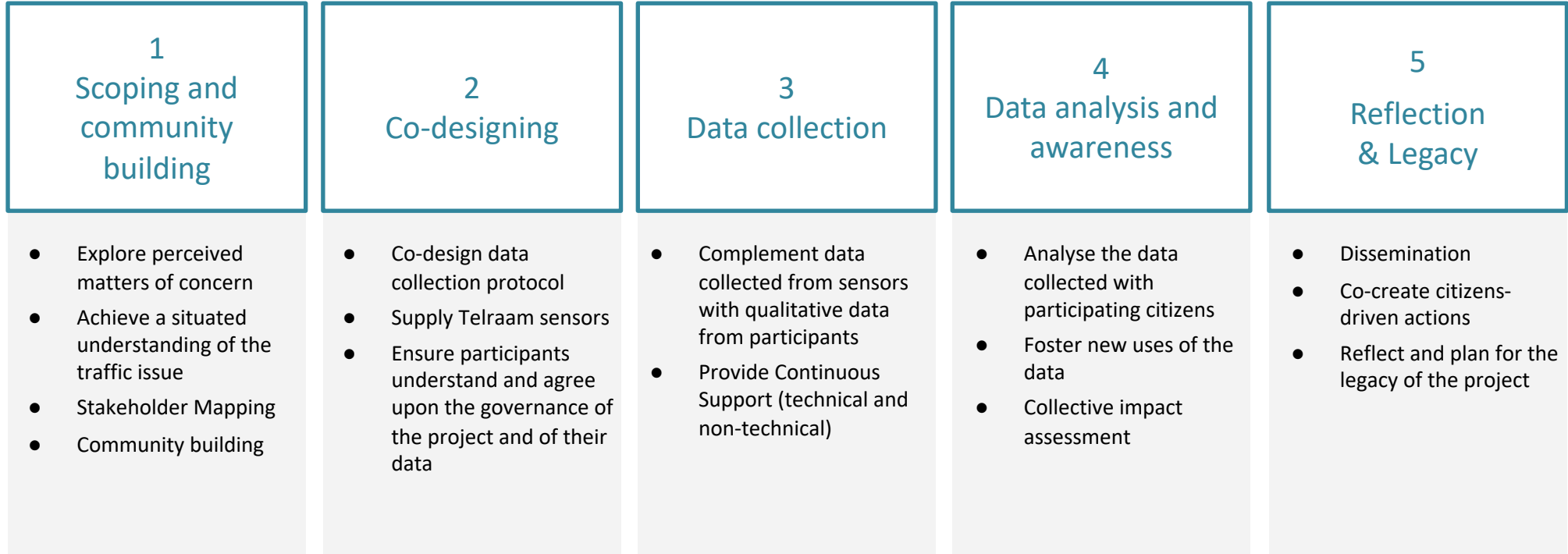
 May 2020  Traffic management  200



The WeCount Engagement Framework



The WeCount Engagement Framework





1. Scoping and Community Building

Phase Overview: *this first phase includes several heuristics for gradually narrowing down the focus of the intervention and, while doing so, building the community of participants. The steps and tools within this phase must be adjusted also depending on the level of granularity of the understanding of a particular issue.*

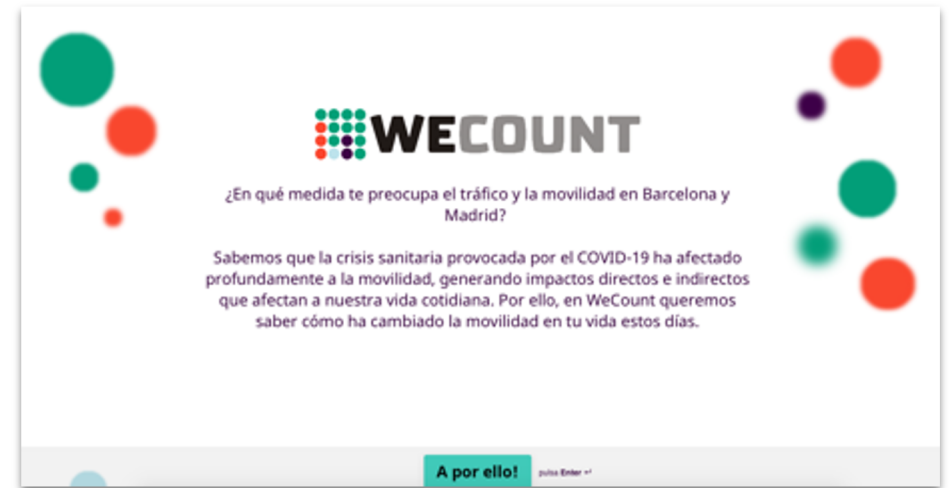
1.1. Achieve a situated understanding of traffic-related issues

Why?

1. Break down traffic issues into more specific matter of concerns experienced in the city;
2. Initially develop pilot narrative;
3. Definition of a current and relevant local issue.

How (i.e. tools and method options)?

1. **Online citywide survey**
2. Desk research of the traffic-related information from publicly available sources as well as of the most affected areas in the target urban location;
3. Mapping of publicly available information on traffic issues and policies;
4. Interviews with local officials;



1.2. Explore perceived mobility-related matters of concern

Why?

1. Break down traffic issues into more specific matter of concerns perceived by citizens;
2. Further develop project narrative;
3. Initial community building;
4. Promotion of WeCount.

How (i.e. tools and method options)?

1. Focus group conversations;
2. Street chats;
3. Participatory Problem Formulation Workshop;
 1. Mapping of perceived issues by neighbourhood
 2. **Ideal mobility canvas;**
 3. Interactive map canvas to be populated with perceived issues;
 4. Dreaming together;
 5. **Traffic timeline.**

¿Cómo se mueve tu barrio?
Problemas y beneficios de la movilidad en un día

Recuerda indicar

- ¿Qué tipo de problema o beneficio es?
- ¿Dónde y cómo se puede detectar?
- ¿Cómo te afecta?

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ENERO FEBRER MARZO ABRIL MAYO JUNIO JULIO AGOSTO SEPTIEMBRE OCTUBRE NOVIEMBRE DICIEMBRE

Contaminación y salud	Tiempo
Seguridad vial	Diseño urbano

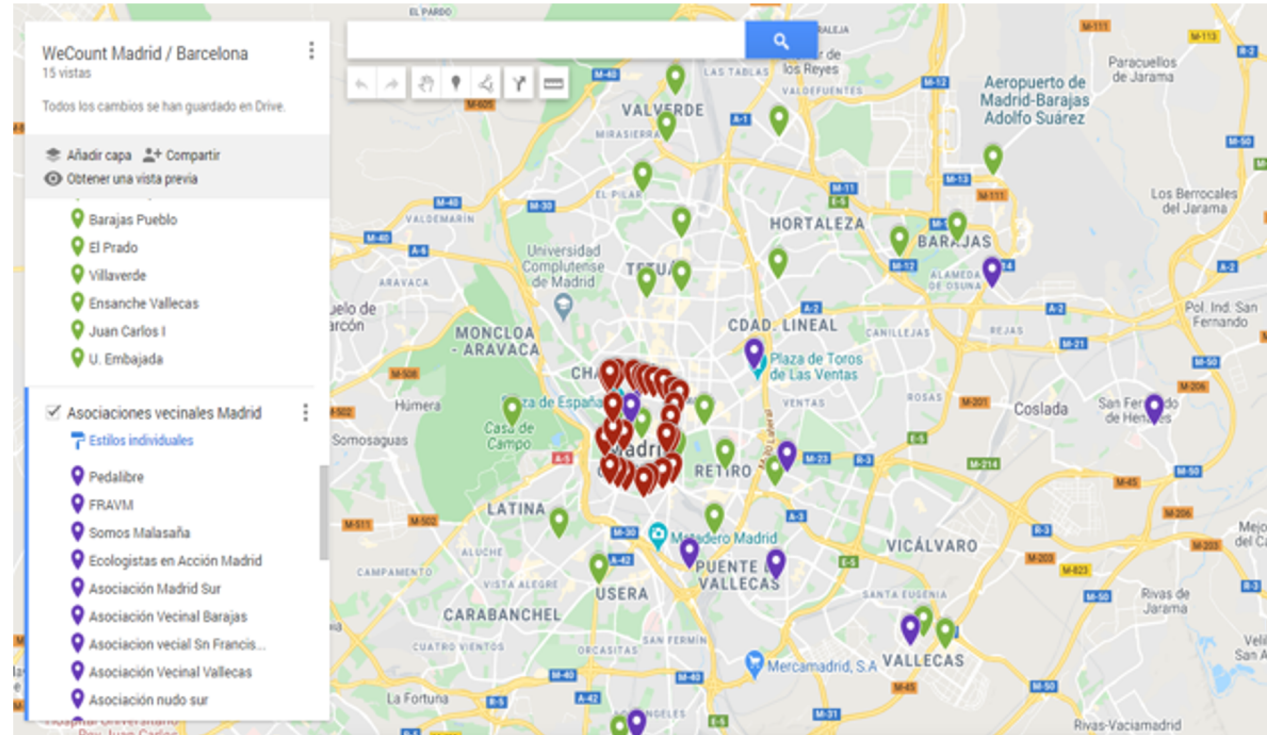
1.3. Map the Local WeCount Ecosystem

Why?

1. Stakeholder mapping
2. To meaningfully inform community building;
3. To inform who the target audience(s) for WeCount are;
4. To target relevant actors.

How (i.e. tools and method options)?

1. Stakeholder Mapping exercise mainly from embedding findings from actions related to 1.1 and 1.2;
2. Additional interviews and/or desk research.
3. **Digital Local Ecosystem Mapping**



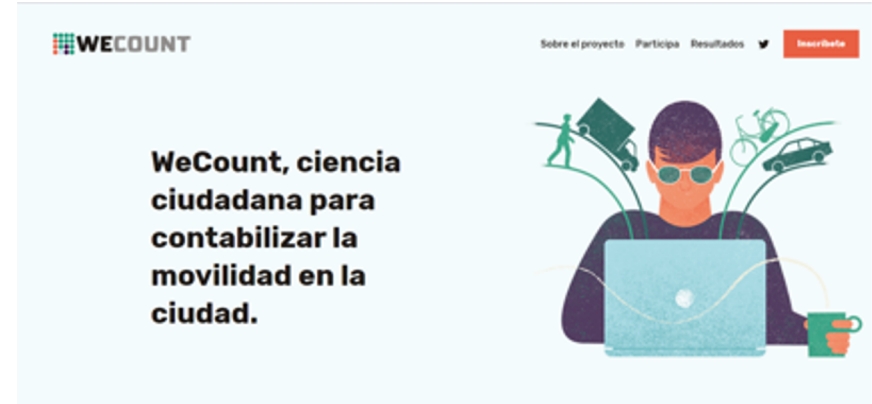
1.4. Community Building

Why?

1. To start an ongoing process to form the community of participants (this will be ongoing throughout the project to leave it open for other citizens to join WeCount);
2. To identify and establish community champions early in the process.

How (i.e. tools and method options)?

1. Massive local communication campaign through **website** social media, flyers, **stickers**, **posters**, letters etc. – dissemination strategy informed by stakeholders’ mapping;
2. Snowballing from first participants recruited (e.g. through initial survey);
3. Storytelling: videos, pictures, mind-maps;
4. Call for pilots;
5. WeCount Launch event / party;
6. Flyers for neighbours
7. Mapping important routes;
8. **Recruitment Cards (only physical workshop)**



Nombre

Contacto

Ahora responde...

¿Tienes una ventana exterior?	Si	No
¿Tienes una vista clara a la calle? ej. sin árboles, postes o algún obstáculo	Si	No
¿Vives en un piso entre planta principal y tercer piso?	Si	No
¿Tu calle tiene más de una vía?	Si	No
¿Tienes aceras en ambos lados?	Si	No
¿WiFi donde se pueda conectar el dispositivo?	Si	No
¿Y enchufe cerca?	Si	No



2. Co-Design

Phase Overview: *in this phase we define the pilot governance framework detailing different level of participation and commitment across citizens, scientific researchers, and other relevant actors / entities. The ultimate goal is to co-create a suitable data collection protocol; source and install the Telraam sensor and/or other data collection instruments; and co-design of governance protocol. At the end of this phase, the data collection campaign is set to start.*

2.1. Co-Design of data collection protocol

Why?

1. To provide participants with the necessary knowledge to design the WeCount study in a way that it addresses the research question(s) / their interests and concerns;
2. To make sure participants learn and understand the technology, the ethical aspects as well as the methodology;
3. To design the pilot according to the participants availability, skills, and expectations;
4. To establish participants' commitment.

How (i.e. tools and method options)?

1. Workshop with motivated participants (could be done in conjunction with W2 or separately);
2. **Collaborative pilot schedule / Calendar Canvas;**
3. **Telraam assembly video**

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2.2. Supply and install Telraam (and other tools)

Why?

1. (for obvious reasons)
2. To guide participants through the registration, assembly, and instalment processes thus improving inclusiveness;
3. To make sure that participants understand the technology, its limitations (and why), how to use it, and how to visualise the data.

How (i.e. tools and method options)?

1. Deployment workshop / online delivery;
2. **WeCount ToolBox;**
3. **Step by step installation guide;**
4. Installation online workshop(s);
5. Train the trainer approach;
6. **Telraam installation video.**



Make your WeCount sensor

ready-to-count



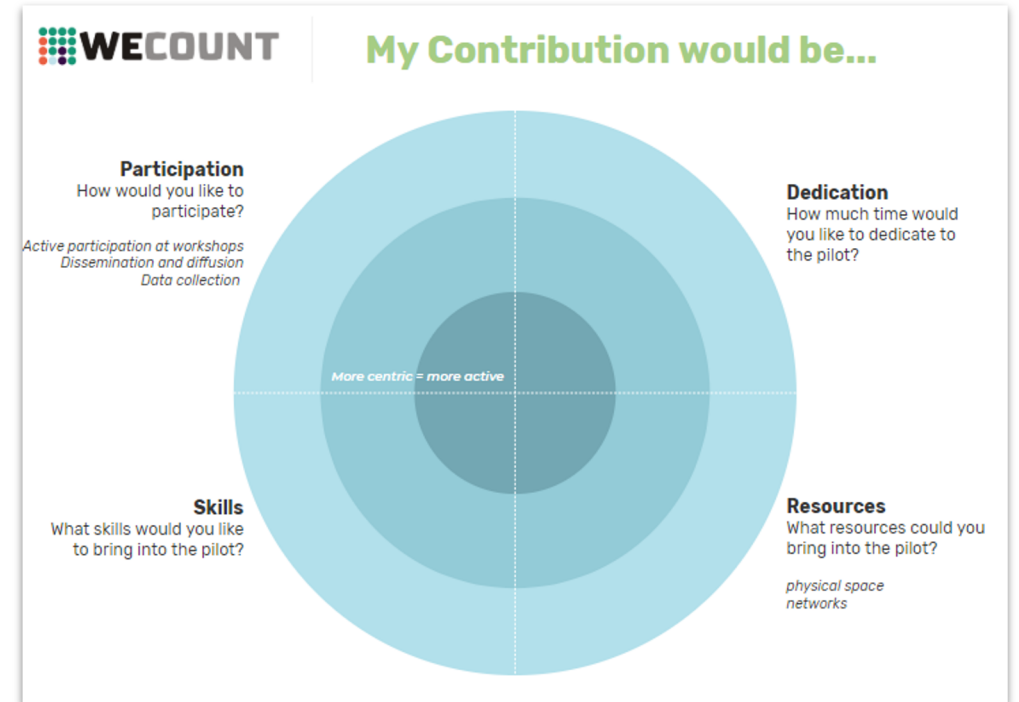
2.3. Project (and data) governance

Why?

1. Establish a final pilot governance framework in terms of roles, decision rights and accountabilities of each individual / entity involved; and,
2. Make sure participants understand and agree upon what data they share and under what conditions. Regarding the latter, clarifying these aspects increases the level of trust between the partner and the participating citizens.

How (i.e. tools and method options)?

1. Risk / benefits Matrix; (only relevant if additional technology is used to collect data beyond Telraam)
2. **Contributions and commons mapping;**
3. Consent form - Telraam





3. Data Collection

***Phase Overview:** at this stage sensors have been deployed and installed and the data collection process starts. Crucial aspects within this phase are: (1) providing continuous support and guidance to participants; and (2) facilitate complementary (qualitative) data collection.*

3.1: Complement data collected from sensors with qualitative data from participants

Why?

1. Enable effective interpretation of the data provided by the sensors.

How (i.e. tools and method options)?

1. Data journals / Sensing diary

3.2: Provide Continuous Support (technical and non-technical) and communication to participants

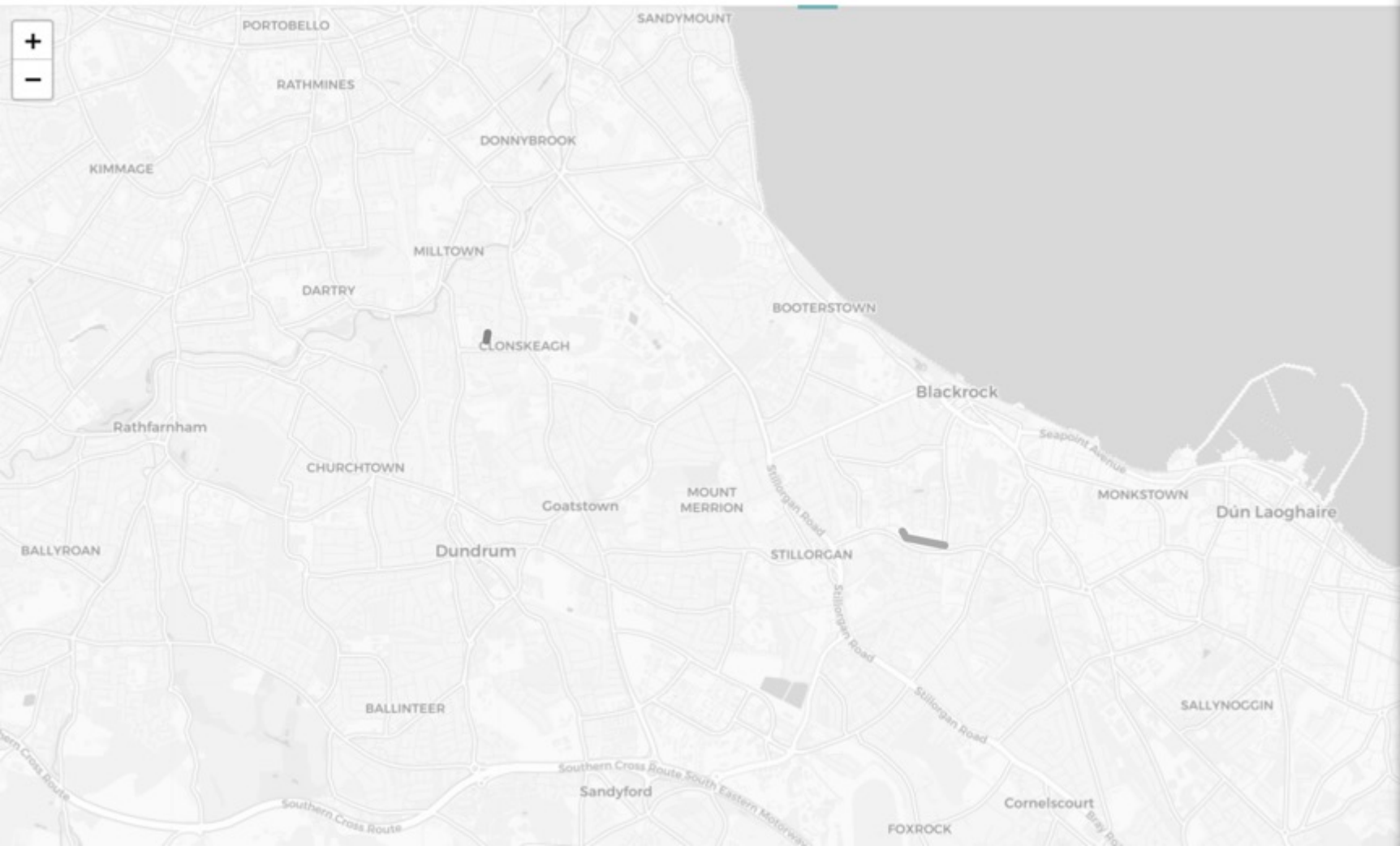
Why?

1. Make sure support is given should any issue occur with the technology or other aspects of participation.
2. To sustain and extend the community of participants

How (i.e. tools and method options)?

1. **Helpdesk via Zendesk;**
2. Information on the website in local language and/or local web pages

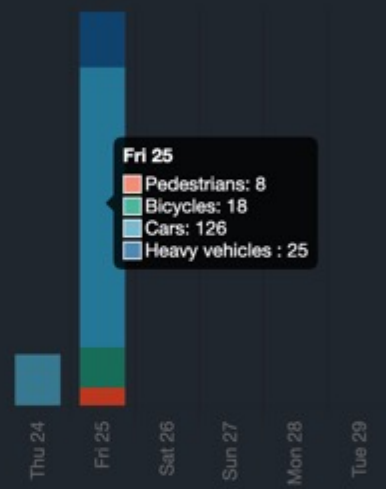




The Maples

Dublin, Ireland

Metingen laatste week



Newtown Avenue - Blackrock
The Maples - Dublin

Meer gegevens...





4. Data Analysis and Awareness

Phase Overview: *While the scope of the pilot (from phase 1) dictates the appropriate methods for analysis, a cornerstone for this phase is to give an opportunity to proactively engage participants in the analysis process. To enable this, the team needs to ensure that effective visualisation is in place with respect to: the findings as these emerge; and aggregated “raw data” as the volume of data collected increases.*

4.1 Analyse the data collected with participating citizens

Why?

1. Make sense of the data together with citizens;
2. Prepare for the co-design of actions informed by the data collected.

How (i.e. options and tools)?

1. Data analysis workshop(s) – *e.g. by theme or neighbourhood*;
 1. Awareness sheets;
 2. **Data discussion sheets**;

4.2 Foster new uses of the data

Why?

1. Explore WeCount as an open data platform where developers can re-use the data generated as a core or marginal component of new services and application.

How (i.e. options and tools)?

1. Hackathon / datathon on the results;
2. API - <https://telraam-api.net/>

4.3 Collective impact assessment (in conjunction with WP5)

How (i.e. options and tools)?

1. Survey / interviews on learning curve of participants, pilot experience etc.





5. Reflection and Legacy

***Phase Overview:** : overall, the last phase of the pilot aims at implementing actions to ensure that: (1) the pilot's findings are effectively disseminated across different venues reaching appropriate audiences; (2) the impact of the pilot is translated into policy making proposal or provokes policy-oriented debates; (3) the learning from the pilot is captured and codified to foster both long-lasting impact and scaling of the pilot; (4) positive and negative experiences are captured and contribute to the overall advancement of the citizen science knowledge base. Planning for this stage should start during the Design Phase.*

5.1 Disseminate results among different audiences and co-create citizens-driven actions

Why?

1. To disseminate results and empower citizens to propose courses of action. The aim is to co-create, plan and deliver actions that can generate recognition of the issue explored in the pilot experiment and possibly make an impact.

How (i.e. options and tools)?

1. Press release; academic papers; white papers; social media and blogs;
2. Wecount policy brief (WP6).
3. Final event / meeting with citizen, project team and local policy makers;
4. **Future newspaper;**
5. Co-creation assemblies
6. **Raambabbel (window chat)**

5.2 reflect and plan for the legacy of the project

Why?

1. To codify and transfer the learning from the pilot and to plan for impact beyond the end of WeCount.

How (i.e. options and tools)?

1. Ex post survey / questionnaires / interviews (**in conjunction with WP5**);
2. Pilot appraisal (**in conjunction with WP5**);
3. Graduation ceremony;

