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**ShareDiMobiHub**

## **Shared Mobility Pilot - Beyond Early Adapters**

**WORK PACKAGE 1 DELIVERABLE 2 & 6**

**Internal document**

**August 2024  
City of Rotterdam**

## Summary sheet

<b>Project Name</b>	<b>ShareDiMobiHub</b>
<b>Title of the document</b>	Shared Mobility Pilot - Beyond Early Adapters (including communication and nudging plan)
<b>Deliverable</b>	D 1.2 & 1.6
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## Project partners

Organisation	Abbreviation	Country
<b>Province of Utrecht</b>	ProvU	Netherlands
<b>Capital Region of Denmark</b>	CRD	Denmark
<b>Vestfold and Telemark county</b>	VTFK	Norway
Subpartner: Statens vegvesen	SVV	Norway
Subpartner: Tønsberg kommune	TK	Norway
Subpartner: Porsgrunn municipality	PK	Norway
Subpartner: Skien municipality	SK	Norway
<b>Promotion of Operation Links with Integrated Services</b>	POLIS	Belgium
<b>City of Amsterdam</b>	AMS	Netherlands
<b>City of Leuven</b>	LEU	Belgium
<b>University of Antwerp</b>	UAntw	Belgium
<b>Transport Authority for the Amsterdam Region</b>	VRA	Netherlands
<b>Mpact</b>	Mpact	Belgium
<b>Autodelen.net</b>	Auto	Belgium
<b>City of Rotterdam</b>	ROT	Netherlands
<b>Hamburg University of Applied Sciences</b>	HAW	Germany
<b>University of Applied Sciences Utrecht</b>	HU	Netherlands

## Document history

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## 1. Problem description

### 1.1 Problem definition

Rotterdam boasts a very broad and diverse array of shared transport options, which are well-established across various districts. In many areas the municipality of Rotterdam is developing mobility hubs to tackle the parking nuisance caused by shared bicycles, scooters, and cargo bikes on pavements. These hubs ensure that shared transport is always available at a fixed location for hiring and parking. Shared transport offers opportunities to reduce the impact of mobility on public spaces and to enhance transport options for Rotterdam's residents. The current shared transport offerings are mainly concentrated in inner-city locations and are used by 'early adopters'; these are groups that are already conscious and adept in using shared transport. There is no insight into the potential use of shared transport among groups that are less familiar with these services and who reside more in the urban districts or suburbs of Rotterdam.

Hence, the question arises: 'How can shared mobility be presented in such a way that Rotterdammers see it and begin using it as an enhancement to their own transport?'

### 1.2 Central theme

Based on initial insights into the barriers to using shared transport and the tools (as explained later on) developed for awareness and trial (Onderzoek Gedragaanpak deelmobiliteit; Ideate – June 2023), efforts will focus on enriching the understanding of how to apply these tools in areas where shared mobility is less 'top of mind'.

With this, the municipality aims to gain insights into what is needed and what works for which target groups to enhance the action perspective on the available shared transport offerings.

Gaining insight also involves working in and with the neighbourhoods. The pilot should also provide guidelines on how to address the challenge of aligning urban policies on mobility hubs and shared transport with the experiences and needs of the neighbourhoods.

### 1.3 Objective

Main Objective: Gain insights into the effects of interventions on the attitudes towards and usage of shared mobility by various target groups, and the evolving transport choices and travel patterns.

From the "Gedragaanpak deelmobiliteit" research, an implementation programme has been developed to create interventions that provide action perspectives on the potential added value of shared transport. These interventions are based on the phases of awareness, consideration, and trial. By implementing these interventions at the neighbourhood level in Oud Mathenesse, Witte Dorp, Lage Land, and Oosterflank better insights will be gained in the impact of the interventions on target groups outside the urban centre.

Underlying goals include reducing nuisance, encouraging more sustainable travel, and expanding transport options for all Rotterdam residents.

This objective aligns with the project goal: ShareDiMobiHub aims to improve urban multimodal accessibility by increasing the introduction and uptake of shared mobility hubs, resulting in a modal shift and changed behaviour towards shared mobility hubs. Rotterdam aims this through target group engagement. More specifically, we aim to engage citizens and visitors of areas in Rotterdam where shared

mobility is not yet frequently used, both because of the characteristics of the people (shared mobility is nowadays mostly used by young, highly educated and relatively wealthy people) as well as the locations/characteristics of the neighbourhoods (not in the city centre).

#### 1.4 Project result

The aim of the intervention is to enhance the awareness and possibilities of using shared transport for residents in the pilot neighbourhoods. The pilot will provide insights into the impact of the deployed interventions on the attitudes and usage of shared transport and the role of mobility hubs for the target groups unfamiliar with shared transport. Based on these insights, the municipality can apply its policies more effectively to expand transport options for all Rotterdam residents and to combat nuisance.

##### *What We Aim to Achieve:*

- Increase awareness of the various forms and services of shared transport.
- Enable people to experience shared transport.
- Gain insight into the added value of shared transport for different target groups and travel motives.
- Understand the effectiveness and long-term feasibility of intervention methods on different target groups and how these affect their attitudes towards shared transport.
- Encourage the use of shared mobility as an alternative or supplement to using one's own car, or as an addition to personal mobility options to enhance accessibility for individuals.
- Provide advice on interventions focused on long term feasibility and usability of the interventions for different target groups.

From ShareDiMobiHub, we have committed ourselves to realizing a number of activities/documents ('deliverables') and outcomes.

We will deliver the following **deliverables** within the ShareDiMobiHub project:

- Organise and hold eHUBS training sessions (lead with other partners)
- Draft plan pilot implementation (1 report – this document)
- Publish tenders to select contractors (1 report)
- Location selection process for shared mobility hubs (1 report)
- Draft hubs deployment reports including best practises (1 report)
- Communication and nudging to stimulate uptake of pilots (communication initiative – included in this document)
- Pilot implementation in VTFK, ROT and LEU (2 external events)
- Impact measurement with surveys (2 data collection activities)
- Impact report (lead with UA)
- Workshop about experiences (1 external event)
- Draft best practise reports (1 report)
- Draft upscaling strategies for, CRD, ROT and PROV (1 report)

We then aim to achieve the following **output**:

- Shared mobility hubs pilots with PT-integration, target group approaches, and PPS and mixed user groups – this essentially involves executing this plan.
- Upscaling mobility hubs strategies adopted and implemented (including digitalisation plans) – after implementing this plan and the initial evaluation, we will devise a strategy describing how we will further scale this up and integrate it into policy implementation.

We aim to realise the following **results**:

- Solutions taken up or up-scaled by organisations – the solution consists of the collection of interventions as described above
- Joint strategies and action plans taken up by organisations – this considers the above-mentioned ‘Upscaling strategy’
- Organisations with increased institutional capacity due to their participation in cooperation activities across borders – we expect that conducting our pilot, along with the evaluation and exchange with partners, will lead to an increase in our organization's capacity

### 1.5 Team

The pilot is a collaboration between ‘Wijkaanpak Mobiliteit’ (Neighbourhood approach mobility), a methodology for addressing mobility issues from a neighbourhood perspective, and the approach to stimulate the use of shared two-wheelers and the project team ‘Vervoerhubs’ (mobility hubs). The team consists of a project leader and 5 colleagues from the ‘Wijkaanpak Mobiliteit’ and three colleagues from the team ‘Shared Mobility and Mobility Hubs’.



## 2. The intervention

The presence of shared transport in the transport hubs is a necessity. The pilot focuses on offering interventions that contribute to awareness, consideration, and trying out shared transport. In the pilot we want to implement a variety of actions, as it will be described in the next paragraph. The actions related to the Mobility Budget are explained in deliverable 1.3. The actions about communication and nudging are part of the next chapter, which also represent deliverable 1.6.

### 2.1 Toolbox

The following interventions will be implemented. These interventions are aimed at communication, nudging, and supporting. The action about communication and nudging are shown in chapter 3. This chapter is also deliverable 1.6.

Awareness:

- General information letter about the presence of mobility hubs.
- Letter and fieldwork for the baseline survey on attitudes and opinions about travel and shared mobility.
- Information flyer as a follow-up to the introduction of mobility hubs.
- Street event aimed at introducing shared mobility and the mobility hubs.

Consideration:

- Mobility Coach in the neighbourhood. A Mobility Coach is a representative from the municipality who assist residents in understanding, accessing, and utilizing various mobility options that best suit their individual needs. The Mobility Coach is stationed directly within the neighbourhood, making them easily accessible and familiar with the specific challenges and opportunities in the area. You can approach them with questions about public transportation, shared mobility services, or other forms of transport. Additionally, they can provide advice on how to save on transportation costs and inform you about where to access services such as cycling lessons.
- Making explainer videos available about shared systems and challenging situations (for the neighbourhoods and for the Mobility Coach).
- Videos about possible aspect of how to use shared transport, social media campaign.

Trialling:

- Mobility budget for pilot participants.
- Mobility Coach will support (potential) participants.
- Install and providing MaaS-app.
- Ensure sufficient availability of shared mobility.

### 2.2 Target groups and the neighbourhoods

The target groups for the pilot are the residents of the neighbourhoods within approximately 500 meters of the mobility hubs. In each neighbourhood, the 'Rotterdamse Wijkaanpak Mobiliteit' methodology will be applied to make a 'snapshot of the neighbourhood' and gather stories from the neighbourhood along with insights about mobility from the users' perspective. This also includes awareness and attitudes towards shared mobility. From these insights, it is possible to identify opportunities and conditions for the use of shared mobility.

The research area is divided into two regions, each consisting of two neighbourhoods, namely:

- Oud Mathenesse en het Witte Dorp
- Oosterflank en Lage Land

In the image below, the research area in the neighbourhoods is shown based on the assumption that the influence area of the transport hub is 500 meters. In these dense neighbourhoods distance is always similar in walking time. The green-colored areas are the research areas within the pilot neighbourhoods.

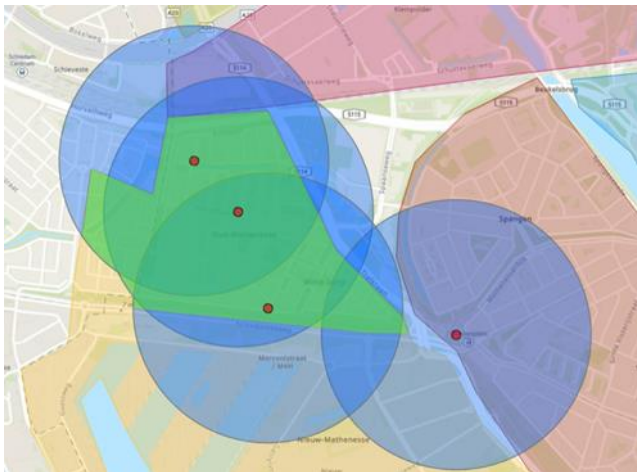


Figure 1: Selected hubs for pilot Oosterflank en Lage Land

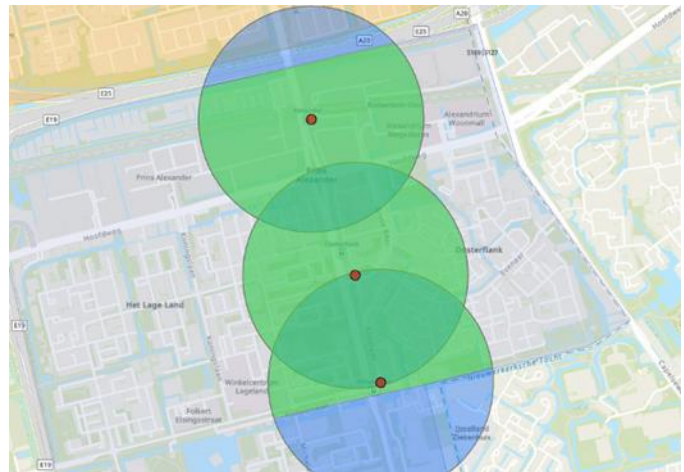


Figure 2: Selected hubs for pilot Oud Mathenesse en het Witte Dorp

### 2.3 Duration of the interventions

The interventions have a total duration of 6 months. This period starts with the first intervention: conducting the baseline measurement. This is the first recruitment moment and a step in raising awareness of shared mobility.

### 2.4 Travelling with MaaS

There are various shared transport providers in Rotterdam. Each has its own applications, payment requirements, and rates. To achieve an integrated user offering for shared transport, a Mobility as a Service (MaaS) provider will be contracted. Based on the conditions for the use of the mobility budget, this will be put out to tender. This will be further explained in deliverable 1.3.

### 2.5 Various types of shared transport

The shared mobility providers are the existing providers that are already active in Rotterdam. The aim is to have as many providers as possible available at the mobility hubs in the pilot areas. The current providers in Rotterdam include:

- BAQME - electric cargo bicycles
- Cargoaroo – electric cargo bicycles
- Check - electric mopeds
- Donkey Republic – bicycles
- Felyx - electric mopeds
- Go Sharing - electric mopeds and electric bicycles
- Lime - electric bicycles

To align with the outcomes of the ‘neighbourhood snapshot’, the aim is also to stimulate shared providers or other forms of shared transport in the neighbourhoods.

### 2.6 Reduce shared transport nuisance

As part of the user-oriented approach, it is also possible to provide more targeted information about the use of shared transport and the associated rules to prevent street parking nuisance.

### 2.7 Organisation and collaboration

An important partnership in the pilot involves the shared transport providers and the neighbourhood networks. Collaboration with the shared transport providers focuses on organizing sufficient and appropriate offerings within the mobility hubs that are part of the pilot. The neighbourhood networks, specifically the Rotterdam colleagues working for the areas, play a crucial role in establishing and maintaining connections with the neighbourhood residents. This also aims at effectively approaching the target groups.

### 3. Communication and Nudging (deliverable 1.6)

In this paragraph, the communication and nudging approach is described. This corresponds to activity 6 of work package 1.

The various instruments being deployed each have their own impact. The letters, information leaflets, explainer videos, and promotional videos stem from the city-wide implementation of the shared transport policy. The Mobility Coach is a neighbourhood-level pilot resulting from the neighbourhood snapshot of Oud Mathenesse en het Witte Dorp. The mobility budget is being rolled out in all pilot neighbourhoods, but each neighbourhood has different frameworks for its application, tailored to the target groups and characteristics of the neighbourhood.

#### 3.1. Communication

The same communication and nudging instruments will be used for both neighbourhoods (Oud Mathenesse en het Witte Dorp as well as Lage Land en Oosterflank). However, the messages and conditions, such as those related to the mobility budget, may be tailored differently based on the outcomes of the neighbourhood snapshots. In short, the communication strategy is target group-oriented and customized per neighbourhood. This includes the locations for communication within the neighbourhood and the groups and networks used to reach the target groups. By linking the pilot to the neighbourhood approach (Wijkaanpak Mobiliteit), it is possible to develop target group and neighbourhood-specific implementations of the interventions.

To be more specific, we have described our target groups and communication materials and -channels as followed:

- Target group: Residents and visitors of the neighbourhoods Oud Mathenesse en het Witte Dorp and Lage land en Oosterflank
- Communication materials and -channels:
  - General information letter about the presence of mobility hubs.
  - Letter and fieldwork for the baseline survey on attitudes and opinions about travel and shared mobility.
  - Information flyer as a follow-up to the introduction of mobility hubs.
  - Street event aimed at introducing shared mobility and the mobility hubs.
  - Mobility Coach in the neighbourhood.
  - Making explainer videos available about shared systems and challenging situations (for the neighbourhoods and for the Mobility Coach).
  - Videos about possible scenarios to use shared transport, social media campaign.
  - Mobility Coach will support (potential) participants.

In this regard, we build on the experiences and knowledge of partners in the ShareDiMobiHub project, for example by learning from previous experiences in the various project meetings.

#### 3.2 Nudging

Various instruments are used, as described in Chapter 2 and the previous subchapter. For the nudging component, the principle is also customization. The instruments are developed generically, such as letters,

flyers, and videos. The target groups determine which videos are suitable to use in the neighbourhoods: What aligns with which target group, which inspiration fits, and what they would be receptive to?

Another important aspect of nudging is the Mobility Coach. The Mobility Coach focuses on direct contact, providing information through conversation and engagement with individuals. This approach is intensive but is expected to have a positive impact on removing barriers for potential participants.

## 4. Monitoring and evaluation

This section outlines the monitoring and evaluation objectives and methodology for the ShareDiMobiHub initiative. It integrates both the broader research and evaluation goals of the project and the specific objectives of the municipality.

### 4.1 Research questions and objective

Our main goal is to find an answer to the following research questions:

*To what extent can our specific set of interventions, aimed at specific target groups, impact the use of mobility hubs amongst these target groups and lead to changed behaviour and a modal shift in the long term?*

1. *To what extent can our measures increase awareness of the various forms and services of shared transportation among target groups?*
2. *To what extent can our package of measures encourage people to try (and thus experience) shared transportation?*
3. *To what extent is shared transportation beneficial for various target groups and travel motivations?*
4. *How sustainable and effective are intervention methods on different target groups, and to what extent do they influence their attitudes towards shared transportation?*
5. *To what extent can we promote the use of shared mobility as an alternative or supplement to using one's own car, or as an addition to personal mobility options to enhance people's accessibility?*

By answering these questions, we aim to improve our policies and actions and contribute to the learning objectives of the ShareDiMobiHub project (and therefore deliverables 1.9, 1.10 and 1.11).

### 4.2 Research activities

To collect the necessary data and insights, the municipality of Rotterdam has planned the following activities:

- **Baseline Survey:** A survey developed by the University of Antwerp will be distributed via letters (and potentially through fieldwork) within a 500-meter radius of the hubs, as specified in deliverable 1.8.
- **Post-Intervention Survey:** A follow-up survey will be administered in the same areas to assess the impact of the interventions. This survey will be drafted in collaboration with the University of Antwerp and other ShareDiMobiHub partners and is also part of deliverable 1.8.
- **Feedback Collection from Service Providers:** The municipality intends to gather data from users of the pilot initiative to collect feedback and enhance the service. Details will be further developed in collaboration with the service provider(s) as outlined in the agreements.

The municipality may implement other research activities to gather the required insights and guide future decisions. A more detailed plan will be formulated with all involved stakeholders once more information about the eventual service and conditions is available.

## 5. Planning

For the above-described activities, we foresee the following planning (including relevant project deliverables):

Phase and activities	Previously	Jul-24	Aug-24	Sep-24	Okt-24	Nov-24	Dec-24	Jan-25	Feb-25	Mrt-25	Apr-25	Mei-25	Jun-25	Jul-25
<b>Preparation phase</b>														
Develop project plan and create team	█													
Hub location selection	█													
Draft reports 1.2, 1.4 and 1.6 (project plan, location selection and comms plan)		█	█											
<b>Tendering phase</b>														
Prepare draft tender for service providers		█	█	█	█									
Collect feedback and improve tender (a.o. with project partners)				█	█									
Publish tender					█									
Select contractor						█								
Draft report 1.3 (tender)							█							
<b>Implementation phase</b>														
Further elaborate pilot with service provider							█	█						
Baseline survey (deliverable 1.8)						█	█							
Elaborate further research approach						█	█							
Draft report 1.5								█						
<b>Pilot phase</b>														
Pilot live								█	█	█	█	█	█	█
Data collection through survey providers								█	█	█	█	█	█	█
<b>Evaluation and dissemination phase</b>														
Post-intervention survey											█	█		
Organise external workshop about experiences (deliverable 1.10)												█	█	
Draft best practice report (with UA, deliverable 1.11)													█	█
Draft upscaling plan (deliverable 2.14)														█

Figure 3: Planning ShareDiMobiHub project Rotterdam

## The ShareDiMobiHub Consortium

The consortium of ShareDiMobiHub consists of 13 partners and 4 subpartners with multidisciplinary and complementary competencies. This includes European cities and regions, universities, network partners and transport operators.

<p><b>Regional authorities and cities</b></p>	<p><b>Universities</b></p>
<p><b>Transport authorities</b></p>	<p><b>Network organisations</b></p>

For further information please visit <https://www.interregnorthsea.eu/sharedimobihub>

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