



Preliminary eHUBs implementation report
Manchester
DELIVERABLE D.T1.5.1

V.1
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Summary sheet

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Project partners

Organisation	Abbreviation	Country
Gemeente Amsterdam	AMS	The Netherlands
Promotion of Operation Links with Integrated Services aisbl (POLIS)	POLIS	Europe
Taxistop asbl	Taxi	Belgium
Autodelen.net	Auton	Belgium
Bayern Innovativ GmbH	BI	Germany
Cargoroo	CA	The Netherlands
URBEE (E-bike network Amsterdam BV)	URBEE	The Netherlands
Gemeente Nijmegen	NIJ	The Netherlands
Transport for Greater Manchester	TfGM	Great Britain
Stad Leuven	LEU	Belgium
TU Delft	TUD	The Netherlands
University of Newcastle upon Tyne	UN	Great Britain
Ville de Dreux	DR	France
Stadt Kempten (Allgäu)	Kemp	Germany
Universiteit Antwerpen	UAntwerp	Belgium

Document history

Version	Date	Organisation	Main area of changes	Comments
0.1	10.01.2021	TfGM	Draft	Confidential to Project Partners. Fit for Teams upload. Do not publish on the internet.

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Figure 2 Potential eHUBS logo, messaging and launch event materials for GM eHUBS project..... Error! Bookmark not defined.

Commented [SK1]: @Sarah Kumeta is this a list of everything that needs to be added as I don’t know much about the EV chargers so would struggle writing that section

Figure 3 Floor markings to depict shared mobility (left) and e-car-club lighting column signage (right)

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1. Executive Summary

Transport for Greater Manchester (TfGM) are a project partner in the Interreg North-West Europe funded eHUBS project. The pilot aims to accelerate the transition to shared and electric mobility services and, therefore, reduce carbon emissions. In this report, the implementation of the eHUBs in Manchester, over 2021 and 2022 will be detailed.

2. Overview of eHUBs in Greater Manchester (GM)

The below table details the make-up of the discrete eHUBs across Greater Manchester, and the vehicles that make up each hub. The sites which are operational are marked green, the ones which are awaiting install are marked orange.

Table 1: eHUB locations across Greater Manchester

eHUB Number / Name:	eHUB Location	Vehicles at this eHUB Location
1 - Bury	Market Street Car Park	2 x Electric Vehicles
2 – Prestwich	Fairfax Road	2 x Electric Vehicles
3 – Ancoats	Bengal Street Blossom Street Jersey Street New Union Street	1 x e-cargo bike 1 x e-cargo bike & 2 Electric Vehicles 1 x e-cargo bike 1 x e-cargo bike
4 – New Islington	Old Mill Street Boond Street	1 x e-cargo bike 1 x e-cargo bike
5 – Whalley Range	Mayfield Road College Road British Muslim Heritage Centre Brantingham Road / Marchwood Ave	1 x e-cargo bike 1 x e-cargo bike 1 x e-cargo bike 1 x e-cargo bike
6 – Chorlton cum-hardy	Oswald Road / Nicolas Road Brantingham Road / Egerton Road North Clarendon Road Longford Road / Reybank Road Claridge Road Unicorn Grocery Manchester Road / Nicolas Road Victoria Park Longford Park	1 x e-cargo bike 1 x e-cargo bike 1 x e-cargo bike 1 x e-cargo bike 1 x e-cargo bike 1 x e-cargo bike 1 x e-cargo bike 1 x e-cargo bike 1 x e-cargo bike
7 – East Didsbury	East Didsbury Park & Ride	2 X Electric Vehicles
8 – Chorltonville	Egerton Road South Ivygreen Road / Kingshill Road	1 x e-cargo bike 1 x e-cargo bike

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	Chorlton Bus Station Provis Road Nicolas Road	1 x e-cargo bike 2 x Electric Vehicles 2 x Electric Vehicles
9 – Stretford	Stretford Mall Stretford Public Hall	2 x e-cargo bike 1 x e-cargo bike
10 – Test Locations	Hulme garden centre Station South	1 x e-cargo bike 1 x e-cargo bike

Commented [SK2]: Is Hulme garden centre still a site as its not Cargoroo's list but is on GMB Hire's list

Commented [SK3R2]: @Samuel Knight one to check with Neil from Cargoroo

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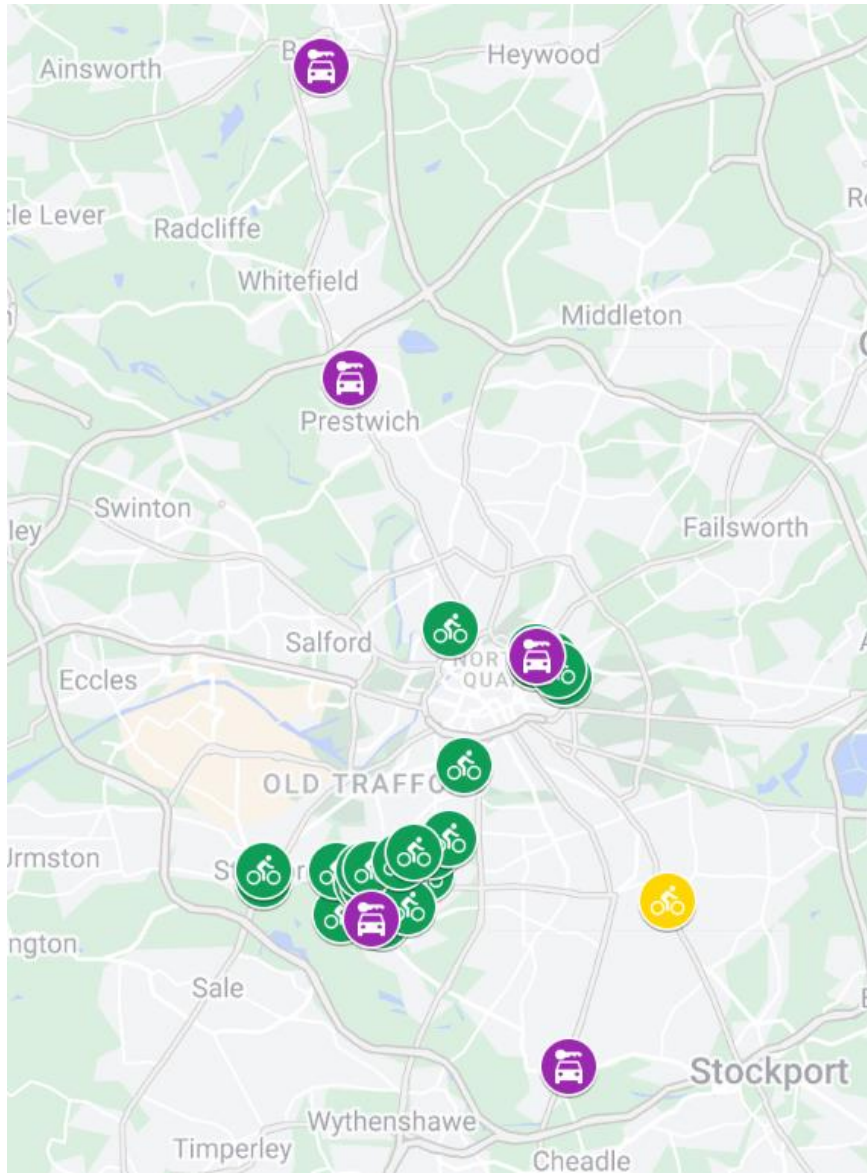


Figure 1: Map overview of all installed eHUBs as of June 2022

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3. Details of Installed eHUBs

3.1 Phase 1 October 2021.

The first eHUB for TfGM opened in October 2021, at East Didsbury Park and Ride. East Didsbury Park and Ride is a car park which provides car and cycling parking for people who make use of the Metrolink (tram service). This site was chosen as the first site to have an eHUB as there was already EVCI installed for parking and charging of individually owned electric vehicles. As a result, there were already some aspects of the charging infrastructure in place, and therefore only the feeder pillar and connection were needed at this site. As such, two electric vehicles launched in conjunction with Enterprise at this site in October 2021.

The feeder pillar was wrapped in eHUBs branded signage, which provides details on how to rent the EVs and the ground was marked with the Interreg 'car share' logo and the words 'CAR CLUB ONLY' to prevent other users from parking in the bays. The images below show the EV wrap and floor markings that will be utilised at all car club sites.



Figure 2: EVCI wrap and associated floor markings at East Didsbury Park and Ride

TfGM have been in close contact with Enterprise, to discuss how the EVs are performing at this site, and they are pleased with the number of people renting these shared cars. Unfortunately, there was an incident where one of the cars was badly damaged at this site when being rented, so there was a period

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when only one car was operational. This was dealt with quickly, and there were two cars available for rental from the beginning of Dec.

3.2 Phase 2 – Dec 2021

TfGM faced delays in the implementation of the e-cargo bikes, initially due to COVID and then there were further delays in the delivery of the bikes into the UK because of BREXIT. There were also some further delays faced, due to some issues with the UK version of the Cargoroo app, however TfGM worked with Cargoroo to rectify these issues. Whilst waiting for the delivery of the e-cargo bikes, TfGM worked alongside Manchester City Council and Manchester Bike Hire to install Sheffield stands and associated signage and floor markings, which are shown in the images below. TfGM also worked alongside the TfGM 'Walking and Cycling' team to develop bespoke e-cargo bike training, which can be booked online, to be available prior to bike launch.

On the 6th of Dec 2021, 5 e-cargo bikes launched across Chorlton to act as a 'soft launch'. This was to ensure that any issues could be dealt with promptly prior to a larger fleet on bikes being available. The e-cargo bikes were closely monitored throughout this week period, and regularly checked by the appointed operator / maintainer Manchester Bike Hire. As there were no issues during this week, a further 5 bikes were made available from W/C 13th Dec.



The table below summarises the fleet that was available at the end of 2021.

Date	Mode	Location
21/10/2021	2 x EVs	East Didsbury Park & Ride
06/12/2021	5 x e-cargo bike	Longford Road/ Reybank Road Oswald Road / Nicolas Road Manchester Road / Nicolas Road Claridge Road

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13/12/2021	6 x e-cargo bike	Brantingham Road / Egerton Road North Brantingham Road/ Marchwood Avenue College Road Mayfield Road Egerton Road South Clarendon Road British Muslim Heritage Centre
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Examples of phase 2 Cargoroo e-Cargobike locations



Figure 3: Claridge Road



Figure 4: Egerton Rd North



Figure 5: Manchester Road



Figure 6: Nicholas Road



Figure 7: Longford Road

3.3 Phase 3 – early Jan 2022

Following the successful roll-out of e-cargo bikes at the end of 2021, a further fleet of e-cargo bikes launched in Ancoats in January 2022. Ancoats is within Manchester City Centre, with numerous restaurants, bars and offices, presenting a different demographic of users compared to the more residential locations of Chorlton and Whalley Range. Due to this, TfGM wanted to launch these after the residential locations, as it was predicted that Ancoats may be more challenging in regard to adoption and potential incidents of anti-social behaviour. As such a small fleet of 4 bikes were launched in mid-Jan to early Feb.

In February and March, the floor markings for the cargoroo bikes were installed, this had been delayed due to the earlier cold weather preventing the paint being applied. The Interreg ‘cargobike’ logo was applied as well as directional arrows to ensure the bike was correctly lined up with the Sheffield Stand, as well as letting people know to keep the stand clear even if a cargobike was not parked there at the time.



Figure 8: Cargobike stand with markings

Date	Mode	Location
21/01/2022 – 10/02/2022	4 x e-cargo bike	Bengal Street
		Jersey Street
		New Union Street
		Blossom Street

3.4 Phase 4 - March 2022 onwards

Our current phase has involved testing Cargoroo bikes at locations that are destinations and trip generators rather than just focusing on residential areas. We therefore placed two cargo bikes at Stretford Mall, one at Unicorn Grocery in Chorlton and one close to Hulme Garden Centre. The idea was that people may use the cargo bikes to carry their shopping home, however except for Unicorn Grocery which has been one of the highest performing bikes, the usage has been lower than those placed in residential areas. They have however not been installed for more than 4 months so it is too early to draw conclusions, and will be continued to be monitored throughout the trial.

We did initially want to place a cargo bike at a metrolink station (tram stop) in Stretford to see if there was a potential use case for people travelling on the tram and then using a cargo bike. However, we faced challenges in installing a stand due to the risk procedure involved with adding any infrastructure close to the tram line, as well as Cargoroo advising against it due to the lack of visibility and it not being close to any residential areas.

As part of phase 4 we trialled the use of posters and labels rather than cube signs to instruct users how they can use a cargoroo bike. This was because the cubes were requiring additional maintenance due to them slipping around or being damaged, the requirement to add a cube also slowed down the installation. The poster was based off the cube design, with an example seen below at Unicorn Grocery.



Figure 9: A4 posters for eHUBs at Unicorn Grocery

Due to challenging levels of vandalism in Ancoats and low usage the decision has been made to relocate some of the bikes to other locations. We are due to place a bike at Station South a new cycle café that has recently opened in Levenshulme along the Fallowfield Loop, which is an off-road cycle route that runs along an old train line. Station South has positioned itself as community hub with a café, co-

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working space and bike repair shop, it also has a bus stop directly outside which has regular buses to Stockport and Manchester City Centre, it is therefore an ideal location for an eHUB.

A cargo bike has recently been placed on Bridgewater Street close to Newbank Tower a residential tower block located in Salford, this is the first eHUB to be placed in Salford and required a Memorandum of Understanding to be agreed with Salford City Council. This does now mean that future locations can be considered in Salford, and there is the possibility to co-locate with other shared mobility modes such as GM Cycle Hire, Car Clubs and the shared e-scooter trial. We have also approached the University of Manchester who have agreed to have two cargo bikes installed, this will provide an opportunity to explore whether there is a use case for providing cargo bikes for students.

Date	Mode	Location
02/03/2022	1 x e-cargo bike	Unicorn Grocery
02/03/2022	1 x e-cargo bike	Hulme Garden Centre
12/04/2022	2 x e-cargo bike	Stretford Mall
17/06/2022	1 x e-cargo bike	Station South
04/07/2022	1 X e-cargo bike	Bridgewater Street

4. June 2022

During this period 2 x additional EVs went live at Fairfax Road in Prestwich. TfGM will work closely with Enterprise to monitor the performance of these vehicles. There have been continued delays with the remaining EVCI due to on-going issues. For example, there has been some challenges in regards to delays procuring the equipment and getting ENW to undertake the installations.

In the meantime, TfGM have worked closely with Enterprise to launch a trial where car clubs without the need for dedicated EVCI rely on the user to utilise other chargers in the network (until the dedicated EVCI is installed). TfGM are continuing to monitor the trial alongside Enterprise and so far usage has been good with users willing to charge their vehicle throughout their journey. The impact of this will influence both the car club and shared mobility strategy.

5. Initial Cargoroo conclusions

Based on the evidence we have received from Cargoroo the e-cargo bikes that have so far performed best have been the residential locations in Chorlton and Whalley Range, this would therefore appear to support the conclusion that e-cargo bikes work best when part of a residential based mobility hub. This conclusion will however be revisited as there are shortcomings in our current data set with some locations not having a cargobike available for the whole quarter, either because they were new locations or due to them having broken bikes that had to be taken offline.

Table 2: Performance of Cargoroo e-cargo bikes by location

Site	Q1 2022 Number of bookings	Q2 2022 Number of Bookings
MA-Clarendon_Road	41.0	103
MA-Ivygreen_Road	68.0	101
MA-Nicolas Road	38.0	85

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MA-Egerton Road South	58.0	81
MA-Victoria Road	47.0	77
MA-UnicornGrocery	40.0	77
MA-Egerton Road North	38.0	71
MA-College_Road	76	65
MA-Claridge_Road	45	58
MA-Longford Road	43	55
MA-Manchester Road	32	48
MA-Mayfield Road	39	45
MA-Brantingham_Road	34	45
MA-Blossom_Street	17	24
MA-ChesterRd		24
MA-Ancoats Clinic		21
MA-Jersey Street	22	17
MA-Barlow Moor Road	89	16
MA-King_Street_Mall		11
MA-Bridgewater Street		1
MA-New_Union_Street	16	
MA-George Leigh Street	10	
MA-Boond Street	0	

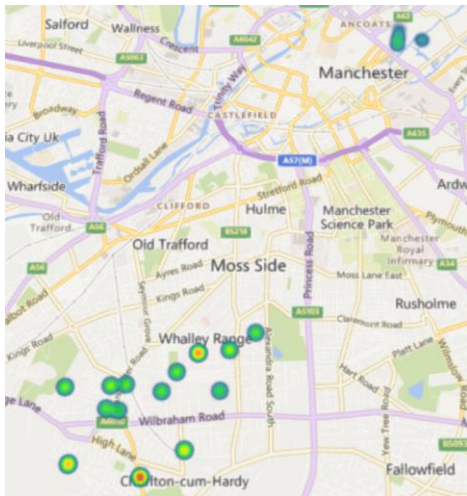


Figure 10: Heat map of Q1 bookings

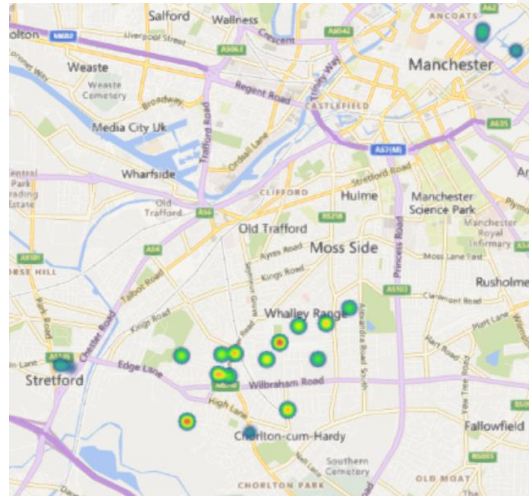


Figure 11: Heat map of Q2 bookings



@eHUBS_NWE
#eHUBS



<https://www.linkedin.com/groups/13711468/>

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For further information please visit <http://www.nweurope.eu/ehubs>



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