

## TRAFFORD COUNCIL

**Report to:** Executive  
**Date:** 18 September 2023  
**Report for:** Decision  
**Report of:** Executive Member for Highways, Environmental & Traded Services

### Report Title

**Approval for an extension of the Trial of Personal Delivery Devices (PDDs) to operate in areas of Trafford**

### Summary

**'Personal Delivery Devices' or 'PDDs' are designed to carry food, groceries, parcels, and industrial supplies directly to a customer.**

**This report outlines the proposal for an extension of the current trial period for a further 6 months and to extend the area in which PDDs are operated, as detailed in the report.**

### Recommendation(s)

**The Executive is recommended to:**

- a) Approve an extension of the current trial period for the use of 'Personal Delivery Devices' or 'PDDs' in areas of Broadheath, West Timperley, Sale West and Ashton upon Mersey for a further 6 months.**
- b) Approve the proposal to deploy PDDs in additional areas as detailed in the report for a trial period of 6 months to run concurrently with the current trial period.**
- c) Delegate authority to the Corporate Director of Place in agreement with the Executive Member for Highways, Environmental & Traded Services to agree and finalise the operating agreement and agree continuation of current trials and additional trial areas if successful.**
- d) Authorise the Director of Legal and Governance to finalise and enter into all legal agreements required to implement the above decisions.**

Contact person for access to background papers and further information:

Name: Sharon Walls / Chris Morris / Andy Hague

Background Papers: n/a

**Implications:**

Relationship to Corporate Priorities	This report supports the Corporate Priorities: Health – can support delivery of healthy eating options. Poverty – allows access to goods and services that ordinarily may not be available. Climate – reduces the need to travel short journeys in the car.
Relationship to GM Policy or Strategy Framework	The projects align with the GM Freight Strategy 2016 by reducing the number of deliveries
Financial	There are no financial implications as a result of the trial – all liabilities and costs will be borne by the operator
Legal Implications:	There is no legislation that specifically relates to the use of robots in this way. There is no case law on whether the robots would be classed as motor vehicles although e-scooters have been classified as such. It is therefore unclear whether these robots can legally be used on the pavements. An agreement will be entered into with Starship Robots to authorise their use within the specified area. If the robots are motor vehicles then the Council has no power to authorise their use on pavements. The current agreement for the existing trial will therefore be expanding to accommodate the extension of the trial and will continue to include an indemnity by the company in favour of the Council.
Equality/Diversity Implications	Potential positive outcomes for those with mobility issues to have easier access to goods and services in their locality
Sustainability Implications	This initiative looks to increase provision for alternative – non-polluting forms of delivery of goods.
Resource Implications e.g., Staffing / ICT / Assets	None
Risk Management Implications	Road safety and traffic management arrangements will be under review during the trial to ensure risks are managed.
Health & Wellbeing Implications	Increased accessibility to goods and delivery services has health benefits for the community
Health and Safety Implications	The PDD's are designed to negate any traffic and highway users' conflicts

## 1.0 Background

- 1.1 Trafford Council were approached in 2022 by Starship Technologies who are one of the world's leading providers of autonomous robot delivery services, focused on making local deliveries more convenient, energy efficient and environmentally sustainable to undertake a trial of the use of the devices in Trafford.
- 1.2 Starship Technologies' 'Personal Delivery Devices' or 'PDDs' are designed to carry food, groceries, parcels, and industrial supplies and first deployed PDDs in Milton Keynes in 2018, more recently in Northampton, and now serves tens of thousands of households in the UK.
- 1.3 The use of PDDs is intended to assist vulnerable residents who have limited access to local shops and offers an alternative way of receiving goods and services. It also helps to reduce the need to travel by vehicle for short journeys to local shops.
- 1.4 The trial supports the corporate priority associated with decarbonisation and reducing carbon emissions.
- 1.5 PDDs operate using Co-Op Stores as a base for operations and so, any areas where PDDs are deployed must be in the locality of a suitable Co-Op store.
- 1.6 Approval for the initial trial was secured by the Council in November 2022. The initial trial commenced on [insert] for a period of [insert]. During the initial trial period, PDDs would be deployed in the area within the yellow boundary and identified on map 1 at in Appendix 1.
- 1.7 Following a review of the current trial Starship Technologies, now seeks to extend the trial period and to expand the trial into other areas of Trafford as detailed in the report and as illustrated on the maps 2, 3 and 4 in Appendix 1.

## 2.0 The Personal Delivery Devices (PDD's)

- 2.1 The PDD's are zero emission robots that use a combination of sensors, artificial intelligence and machine learning to travel on pavements and navigate around any obstacles. Computer vision-based navigation helps them to map their environment very accurately and a central control centre can intervene if the robot encounters a significant issue.



### 3.0 Review of Current Trial and Proposals.

- 3.1 Following approval in November 2022, Starship Technology had identified that the area within the yellow boundary and identified on map 1 in Appendix 1,,was a good operating area for the robots practically be deployed. There are two Co-op stores within the initial area which meant that the PDDs could cover a reasonable, discreet area from those two stores without causing long wait times for customers.
- 3.2 The current trial has been reviewed and based on a survey undertaken in collaboration with Starship Technologies the survey extract, contained in section 3.4, indicates the usage and take-up the trial with over 9000 households taking up the service.
- 3.3 The monitoring of the current trial has demonstrated positive outcomes for reducing CO2 emissions within the trial area of Trafford with only minimal number of complaints or enquiries that challenge their operation.
- 3.4 The following data indicates the metrics associated with the current trial area.

Variable	Value
Miles Driven	6493
Reduction in CO <sub>2</sub> in kg	1063
Reduction in Vehicle Miles	2664
Households Served	9840

**Members of Facebook Group:** 816

**Unique app downloads:** Over 5,000

**Households served:** 9,840

**Road and drive crossings made:** 57,500

**Customer survey feedback:**

- 34% of customers told us they would drive to the same store or a different one if Starship had not been available.
- 22.2% of respondents said they have a disability or live with someone who does
- 75% of people said they thought the service would benefit those with disabilities.
- 36.4% believed the main benefit was that Starship robots are good for the environment and 15.9% say it saves their family time.
- 79% say that their friends/family have said that they would like robots in their local area.

- 3.5 In considering the continuation and expansion of the trial length and area the review data and any potential negative impacts have been assessed by Starship Technologies and Trafford jointly. Negative impacts include conflicts with pedestrians and cars whilst in operation resulting in complaints and potential safety concerns. Any concerns with potential conflicts however, are assessed by the Highways Team at Trafford to ensure this is minimised as far as practical prior to the start of the trial. Typical problems include routes on narrow footpaths, operating in high traffic areas where known conflict exists.
- 3.6 Based on the success of the current trial to date approval is sought to:
1. extend the period of the current trial, in the area detailed on Map 1, by 6 months; and
  2. to expand the areas to which PDDs are deployed with Trafford (as detailed on Maps 2,3 and 4) also for a period of 6 months.
- 3.7 The PDDs operate from local Co-op stores as their base hence the proposed extension of the trial area encompasses additional Co-op stores that extend into adjacent areas and wards in Trafford as detailed on maps 2, 3 and 4 in Appendix 1.

#### **4.0 Ongoing Monitoring**

- 4.1 The extended trial, if approved, will continue to be monitored by Starship Technologies and the Council in order to oversee and advise on any conflict particularly with the storage of the robots at the Co-op stores and pitfalls with any proposed routes used in the delivery of goods and will be ongoing during the trial.
- 4.2 If at any point during the extended trial, the take up and usage figures are considered low by the Starship Technologies, the trial may be terminated.

#### **5.0 Communication and Engagement**

- 5.1 Initial consultation with members has already been undertaken and Starship Technologies will be undertaking further consultation and engagement with ward members as part of this proposal and to prior to rolling out the expansion.
- 5.2 Starship Technologies will also do a direct mail drop to all households in the areas identified explaining who they are, and the service being offered (as well as advertising for Co-op). They have also produced a short video 'About our robots' that will quickly and visually provide answers to frequently asked questions.
- 5.3 Starship Technologies will also be providing a briefing pack for local councillors so that they have the information they need should constituents get in touch.

## 6.0 Other Options

6.1 The alternative option is to not support the expansion of the current trial term, which will terminate after the initial period or to support the expansion of the trial areas.

## 7.0 Consultation

7.1 Whilst there are no formal requirements to consult with the public on this trial local Ward members have already been contacted about the trial and a media campaign will be launched to support the ongoing and expansion of trial as highlighted above. Feedback from local residents and Members will be collated and monitored throughout the trial periods.

## 8.0 Reasons for Recommendation

8.1 Due to the success of the initial trial, as detailed in the report, approval is sought to extend both the term of trial and the areas within which the trial is operated to continue to add benefit to vulnerable customers who value this service.

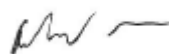
**Key Decision** (as defined in the Constitution): Yes

**If Key Decision, has 28-day notice been given?** Yes

**Finance Officer Clearance** (type in initials) ....PC.....

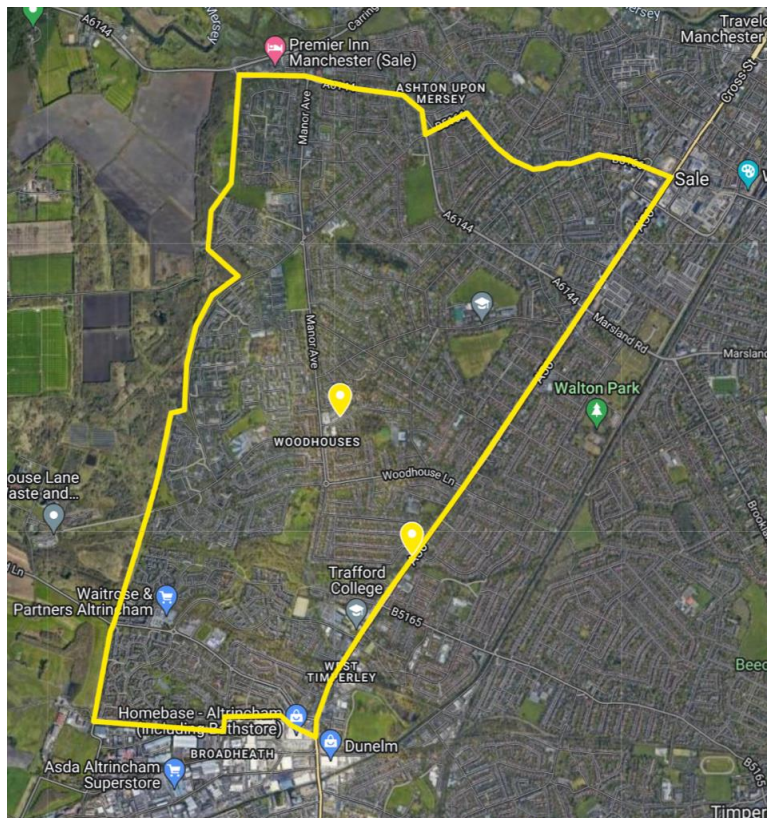
**Legal Officer Clearance** (type in initials) .....DS.....

**[CORPORATE] DIRECTOR'S SIGNATURE** (electronic)



To confirm that the Financial and Legal Implications have been considered and the Corporate Director has cleared the report prior to issuing to the Executive Member for decision.

## Appendix 1- TRIAL AREAS



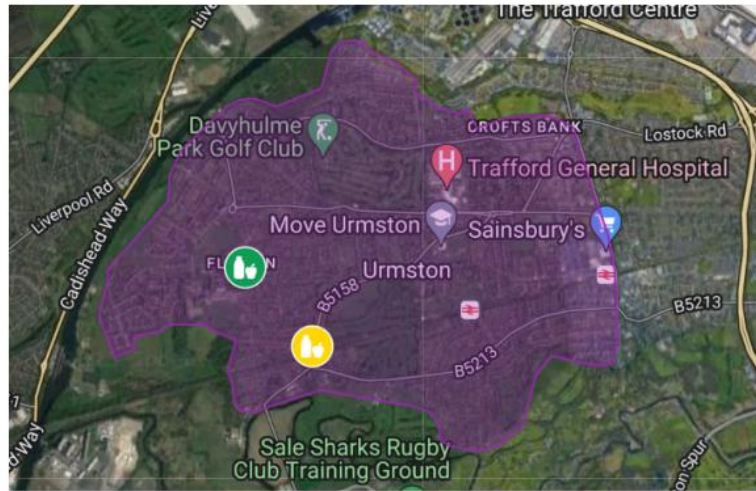
**Map 1**

**Existing Trial Area to be extended for a further 6months.**

**MAPS 2,3,4 BELOW –  
SHOW THE PROPOSED EXPANSION OF THE TRIAL AREAS**

## Urmston

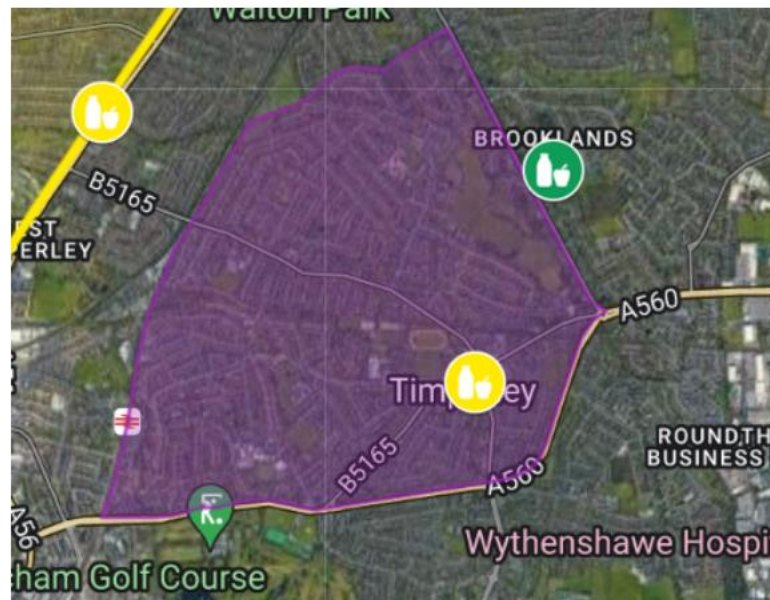
Operating from the Co-op stores on Woodsend Road and Ambleside Road (in the wards of Davyhulme and Flixton)



Map2

## Timperley

Operating from the Co-op on Stockport Road (in the Ward of Timperley Central)

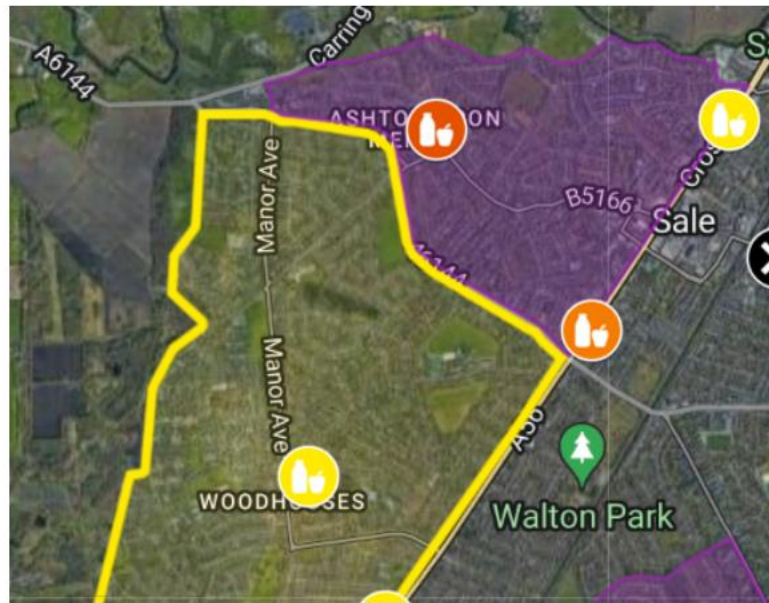


Map3



**Ashton upon Mersey**

Operating from the Co-op store on Cross Street (in the Ward of Ashton upon Mersey)



**Map4**