

Title of meeting: Traffic and Transportation Decision meeting

Date of meeting: 18 March 2022

Subject: Portsmouth Rental E-Scooter Trial Scheme

Report by: Tristan Samuels - Director of Regeneration

Report Author: Hayley Chivers, Interim Transport Planning Manager

Wards affected: All

Key decision: No

Full Council decision: No

1. Purpose of Report

This report provides update on the operation of the rental e-scooter trial and seeks approval to further extend the rental e-scooter trial from the current scheduled end date of 31st March 2022 until 30th November 2022.

2. Recommendations

It is recommended that the Cabinet Member for Traffic and Transportation:

2.1 Notes the information contained within the report on the rental e-scooter trial to date.

2.2 Approves renewal of the Vehicle Special Order (VSO) for Portsmouth's e-scooter rental scheme to 30 November 2022, in accordance with the Department for Transport's new end date, to legally enable the rental e-scooter trial to extend beyond its scheduled end date of 31 March 2022.

2.3 Notes that Portsmouth's corresponding Experimental Traffic Regulation Order (ETRO) to allow rental e-scooters in cycle tracks, cycle lanes and bus lanes is due to expire on 15 September 2022, and that a further Cabinet Member decision will therefore be required in due course for the e-scooter rental scheme to effectively operate beyond that date.

3. Background

Overview

- 3.1 As part of the government's response to COVID-19, and to support a 'green' restart of local travel to help mitigate reduced capacity on public transport, the Department for Transport (DfT) fast-tracked and expanded trials of rental e-scooters. The DfT considered that e-scooters offered the potential for fast, clean and inexpensive travel which could ease the burden on transport networks and allow for social distancing.
- 3.2 The trials enable essential insights for the DfT and councils as to how rental e-scooters contribute to the transport mix in urban centres. Following the trials, it is anticipated that the DfT will assess whether these vehicles should be legalised in the UK as part of their Future Transport Regulatory Review.
- 3.3 During the trials, e-scooters are classified as motor vehicles, and the relevant motor vehicle insurance has to be provided via the scheme operator. E-scooters must meet requirements for vehicle construction and approval set by the DfT.
- 3.4 Evidence from existing e-scooter schemes in cities around the world suggests they have the potential to encourage modal shift from private motor vehicles. Survey data collected as part of the trials has been encouraging in this regard and is discussed further on in this report.
- 3.5 The DfT is only permitting the trialling of rental e-scooters. The use of privately owned e-scooters on the public highway will remain illegal during the trial period.
- 3.6 The DfT had planned that trial schemes could be converted to pilot schemes in 2022 ahead of the potential development of a longer-term legislative framework governing the use of e-scooters on the public highway. However, in October 2021, correspondence was received from the DfT stating that "It would be helpful if all current trial areas could participate in the trial extension [beyond 31st March 2022], but there is no compulsion and no need to make an immediate decision. We will write to trial areas in the New Year asking them if they want to take part in a further trial extension to November 2022."

Background to Solent Transport's E-Scooter Proposal to the DfT

- 3.7 In March 2020, Solent Transport was awarded £28.8m of funding from the DfT's Future Transport Zones (FTZ) programme to implement a programme of trials of innovative approaches to transport across the Solent area, from 2020/21 to 2023/24. This programme did not include rental e-scooter trials.
- 3.8 During summer 2020, the DfT announced the possibility for FTZ Local Authorities to run e-scooter rental trial schemes as part of the transport restart response to the pandemic, on the basis that funding is reallocated from within the existing FTZ programme to facilitate such projects.
- 3.9 Following a review of the Solent FTZ programme in light of the COVID-19 pandemic, some schemes were delayed. Subsequently, Solent Transport undertook work with the DfT to enable reallocation of circa £900k from areas of the FTZ programme with reduced need to provide a subsidised set of e-scooter schemes across the four Local Transport Authority areas in the Solent region.
- 3.10 On 31st July 2020, Solent Transport submitted a proposal to the DfT requesting permission to operate an e-scooter trial in the Solent area, with up to four sub-projects in Portsmouth, Winchester, Southampton, and on the Isle of Wight.
- 3.11 The Isle of Wight scheme was the first part of the Solent project to launch in November 2020, with the operator Beryl. At the time, the Isle of Wight launch triggered the 12-month trial period for the Solent Region. This is the reason why Portsmouth's was originally scheduled to run until 26th November 2021, although it was subsequently extended until 31st March 2022 following approval at the Traffic and Transportation Cabinet Meeting in November 2021.

Trial Aims

- 3.12 The main aim of the trial is to build robust evidence about the benefits, public perceptions, and wider impacts of e-scooters in order to inform legal changes that may be necessary beyond the e-scooter trial period.
- 3.13 Key areas that the council and DfT, working with Voi, have been gathering information on include:
- Safety outcomes for e-scooter users and what influences this
 - Interaction with, and effect on, other road users
 - Public perceptions of the e-scooters, including impacts for people with disabilities and related groups
 - Nature of modal shift and new journeys that have been enabled
 - Characteristics of users and how uptake and outcomes differ for different groups
 - Local Authority perception of effects on their transport system and public environment.

- 3.14 Voi is continuing to collect quantitative and qualitative data regarding the effects of the scheme during the trial. Ongoing engagement with key stakeholder groups will continue to take place throughout the trial to understand perception and impacts. The information collected will contribute towards the DfT's assessment review process. The council has also undertaken its own perception and behavioural change surveys, which are referenced further on in this report.

Policy Context

- 3.15 The trial supports the ambitions of Portsmouth's adopted Transport Strategy 2021 -2038, in particular Policy C, which states that micromobility can provide an affordable, convenient, low-energy alternative to the private car and can, when used responsibly, perform a particularly useful role in the first or last mile of a journey, for example, making it easier to get to a train station or bus stop from home or, at the other end of a journey, to a final destination.

4. Operations and Parking

- 4.1 The e-scooter trial vehicle being used in Portsmouth offers a number of technological advances, including:
- A 60-mile range and 5-year lifespan
 - A maximum speed of 12.5 miles per hour, with ability to restrict speed in specified zones
 - Swappable battery technology to enable batteries to be changed 'in the field' by Voi operatives
 - Unique vehicle ID plate and easily identifiable colouring / branding
 - Lights and reflectors
 - 10-inch pneumatic tyres
 - Tamper-proof bell
 - Turning indicators
- 4.2 The geofencing technology that is fundamental to the operational model has enabled the council to work with the operator to determine where the e-scooters can go in the city - the defined operating area. In basic terms, when the e-scooter vehicle leaves the defined operating area, it will gradually slow and come to a halt, requiring the user to walk the scooter back to the operating area.
- 4.3 The geofencing technology has also enabled the introduction of 'no-go' zones (e.g., Commercial Road pedestrianised area), and 'go-slow' zones (which can be set to 7.5mph or 5mph), typically used in busier areas or areas that may be subject to conflicting movements. This limits the e-scooter speed in these areas to the equivalent of a fast walking pace. An example of a 5mph go-slow zone is Guildhall Square.

Parking

- 4.4 The scheme in Portsmouth is a fully racked scheme with parking racks located in tightly-geofenced mandatory parking zones. E-scooter users are required to leave the e-scooter in a parking rack at the end of their ride, with the geofencing technology ensuring that rides can only be finished within the defined zone.
- 4.5 Portsmouth is one of the first Local Authorities in the UK to integrate physical parking racks as part of the scheme. Voi worked collaboratively with the Royal National Institute for the Blind (RNIB) to develop the design of its parking racks.
- 4.6 Voi has indicated that Portsmouth and Southampton's "Parking Cop" scores, based on site parking assessments carried out to determine the proportion of scooters that are well-parked, are constantly among the best in Europe and superior to their other UK markets. This is largely attributed to the racked model having instilled positive parking behaviours, along with the more recent addition of "max caps" that limit how many scooters can be parked at a given location.
- 4.7 A draft parking expansion strategy was developed in September 2021 to guide the future expansion of the scheme towards ensuring it meets the council's wider transport strategy. This has been successfully implemented to more strategically inform the selection of sites to put forwards to the E-Scooter Trial Board and (for those sites that are approved) progress to public consultation.

Safety, Education, and Compliance

- 4.8 Voi provides fully comprehensive motor vehicle insurance for e-scooter riders. In addition, it employs a number of measures in relation to Driver Education, Compliance and Health & Safety. Key examples include:
- the launch of the first e-scooter traffic school
 - a fully integrated driver licence screening process
 - provision of free / heavily subsidised helmets, and incentives for helmet use
 - awareness campaigns and ongoing community engagement
 - regular safety events, including helmet giveaways, in Guildhall Square
 - stringent sanitary measures for COVID-19

Enforcement

- 4.9 Voi employs a range of tools to tackle anti-social behaviour and misuse of e-scooters. In addition to the measures referenced above, the following approaches have been undertaken:
- Meetings are regularly held between the council, Hampshire Police and Voi, ensuring any issues are identified and collaboratively addressed, while Voi supported the police in delivering a Facebook Live scooter safety segment
 - A team of Voi field operatives (called "Ambassadors") addresses problems with abandoned / incorrectly parked e-scooters and misuse of vehicles

- Voi's distinctive e-scooters carry a unique registration plate so that anyone can report a wrongly parked e-scooter or bad driver behaviour to Voi via a 24/7 freephone number or online
- Voi has implemented a "three-strikes" policy, whereby a user reported for an offence is first banned for 7 days and is required to complete its online traffic school. Following a second strike, the user is banned for 30 days. Finally, a further offence results in the user being permanently banned from using the e-scooters. A ban can be applied for a range of offences including, but not limited to, allowing an underage rider to use an e-scooter, pavement riding, and twin riding. To date, 1012 temporary bans for inappropriate riding and 27 permanent bans have been issued to Portsmouth e-scooter rental users

5. Scheme Performance Summary, Monitoring, and Evaluation

Key Statistics

5.1 A summary of key trial statistics* to date, as of 13 February 2022, are:

➤ Number of unique users:	35,711
➤ Number of active vehicles	531
➤ Total distance travelled:	741,965km
➤ Total rides:	232,799
➤ Average ride time:	17.9 minutes
➤ Average distance travelled:	2.8km
➤ Riders/e-scooter/day:	1.9
➤ CO ₂ equivalent saved:	62.6 tonnes
➤ Car trips replaced:	102,432
➤ Litres of gasoline not burnt	27,143

* Statistics are provided by Voi from their e-scooter ride data, extrapolated from the ride data and from their user surveys.

* Voi's estimate for carbon savings is based on their carbon calculator, which was validated by Dr. Manos Chaniotakis, lecturer in Transport Modelling and Machine Learning at UCL. It is based on trip data, local mode shift percentages collected via Voi's surveys (which are less favourable than the council's own survey data, as detailed in the next section of this report), the government's emission factors for cars and buses, and their e-scooter's lifetime carbon emissions based on a Life Cycle Assessment tool developed by Ernst & Young. Emission savings are calculated in CO₂ equivalent units, meaning they factor in all GHG.

5.2 Numbers of e-scooter riders and distance travelled per week can be influenced by factors such as the weather, or major events, but generally Portsmouth saw continued growth in these metrics until the quieter winter months. The riders per scooter per day figure of 1.9 is close to Voi's usual target of 2 across a full year (it tends to be higher in the summer months and lower in the winter). As the

parking hub network grows and connectivity improves, it is expected this growth in use will continue.

Survey Data

- 5.3 Voi's national summer 2021 in-app user survey received responses from 465 Portsmouth users, with 44% of respondents saying they would have used a car or taxi for their last journey if scooters had not been available.
- 5.4 The council has carried out three online surveys. Wave 1 was undertaken before the trial began, Wave 2 between 23rd August 2021 and 19th September 2021, and Wave 3 between 6th December 2021 and 2nd January 2022.
- 5.5 These surveys had good response rates, with Wave 2 receiving 3107 responses and Wave 3 receiving 1,991 responses. Key findings from Wave 2 and Wave 3 were broadly similar. Findings from the recent Wave 3 survey are summarised below, and both surveys are included with this report as Appendices A and B.
- 5.6 An encouraging finding from the Wave 3 survey is that 60% of respondents said they would have used a car or taxi for their last journey if they had not used an e-scooter. This is a far higher figure than in most cities abroad, and shows that in Portsmouth's case at least, an e-scooter rental scheme provides a genuine alternative to the private car, thus bringing a significant reduction in emissions.
- 5.7 The most important reason respondents have decided to use the trial scheme is for the environment / sustainability, with nearly half of respondents feeling this was very important to them (48%), followed by 43% of respondents who feel using the rental e scooters for leisure / fun was very important.
- 5.8 A majority of non-trial users felt safety concerns had prevented them from using the trial (68%); this is by far the most commonly cited reason among non-users, ahead of other (50%), and helmets not being provided (33%). The fact that 37% of the "other" free text comments have been coded as "dangerous" shows safety concerns are the key reason preventing non-users from using the rental trial. Safety concerns were a less commonly cited reason (39%) why trial users have been or would be prevented from using the scheme. The most commonly cited reason (48%) among trial users is a lack of e-scooter parking hubs where they would like to start and finish their journeys, while the cost of hiring e-scooters is seen as a barrier by 40% of users.
- 5.9 When trial users were asked when they have felt safe using an e-scooter, they responded that they have felt most safe in a cycle lane separated from the road, with 87% feeling safe or very safe using rental e-scooters here.
- 5.10 80% of trial users agreed that the benefits of rental e-scooters outweigh any issues they create, while 76% of non-trial users disagreed with this statement.

- 5.11 As respondents to the surveys had a disproportionate grouping from older age groups (e.g. around 70% of respondents were aged 45 and over, compared to them representing around 40% of Portsmouth population), independent analysis conducted by the transport consultancy Steer included an exercise to see how responses to "attitudinal questions" (e.g. Overall, how do you feel about rental e scooters operating in Portsmouth?) might shift if respondents' ages were representative of the Portsmouth population. The overall trend with the reweighting process was that negative perceptions decreased, and positive perceptions increased, by between 8% and 15%.

Safety

- 5.12 Voi uses the DfT categorisations for accidents, which are defined as follows:

Damage only: An accident in which only the vehicle, other vehicles or surrounding infrastructure are damaged.

Slight injury: An injury of a minor character such as a sprain (including neck whiplash injury), bruise or cut which are not judged to be severe, or slight shock requiring roadside attention. This definition includes injuries not requiring medical treatment

Serious injury: An injury for which a person is detained in hospital as an "in-patient", or any of the following injuries whether or not they are detained in hospital: fractures, concussion, internal injuries, crushings, burns (excluding friction burns), severe cuts, severe general shock requiring medical treatment and injuries causing death 30 or more days after the accident

The 176 accidents reported to Voi during the trial to date (up to 18th February 2022) can be categorised as follows: 79 damage only, 78 slight, and 19 serious. Independent analysis suggests the number of serious injuries may in fact be slightly lower, 15 since the beginning of the trial, as Voi included incidents that were unverifiable or lacked an accompanying accident log. It is also worth noting that five of these accidents occurred in July, and there is no clear reason for this spike - they occurred on five different dates, ridership levels were similar to other months, and the summer weather and light evenings generally facilitate safe riding.

- 5.13 Solent Transport is working with Local Authorities and partner organisations to ensure the evaluation of the trial includes an assessment of safety compared to alternative modes of travel, such as cycling, and includes consideration of the factors that influence injuries and accidents. Accidents and injuries can also be related to infrastructure provision, and as part of the evidence review, the impact of available cycle lanes on incident hotspots will be assessed.
- 5.14 Voi has noted that reported incidents often remain unverified, or the user does not follow up the report to provide an outcome, so validating the report is difficult. The validation of accident data will form part of Solent Transport's evaluation of the trial alongside Local Authorities and partner organisations, and

it is hoped that it will be possible to obtain richer data from the police in due course (currently, there does not appear to be a reliable police data distinction between incidents involving rental e-scooters and privately-owned scooters, but it is well-understood that the incident rate for the latter is significantly higher).

- 5.15 Serious incident, injury or fatality remains the highest risk factor for the trial given the relatively high level of use. The council, Voi, and Solent Transport have measures in place to mitigate this as far as possible, as detailed in Section 4. Ongoing improvements in infrastructure for alternative modes of travel in the city will also mitigate this risk further, benefitting cyclists and e-scooter users.

Stakeholder Engagement

- 5.16 Prior to the launch of the trial, the council and Voi held virtual meetings with representatives from the following organisations to discuss the details of the scheme and understand any specific concerns:

- Hampshire Constabulary
- Portsmouth Hospitals NHS Trust
- Solent Hospitals NHS Trust
- Gosport Ferry
- FirstGroup
- Stagecoach South
- University of Portsmouth
- Portsmouth Cycle Forum
- Portsmouth Friends of the Earth
- Cycling UK
- Sustrans
- Portsmouth International Port
- Hampshire Fire & Rescue Service
- Taxi Trade Representatives
- Visually Impaired Action Group (VIAG)
- Wightlink
- South Western Railway

- 5.17 Dialogue has continued with a number of these organisations, including Hampshire Constabulary, the hospitals, University of Portsmouth, and VIAG. An update was provided to the November 2021 meeting of the Transport Liaison Group (TLG) for Transport Operators and Stakeholders, and a recent meeting was held with University of Portsmouth Students' Union officers.

Marketing and Communications

- 5.18 The council has worked with Solent Transport and Voi to deliver clear, targeted, Portsmouth-specific communications and messaging to relevant audiences.
- 5.19 Key messaging has been delivered consistently across the Portsmouth region to inform and reassure users about the intended benefits of the e-scooter trial from the outset - safety, reliability, cleanliness, ease of use and accessibility.

6. Reasons for Recommendations

- 6.1 The trial has enabled e-scooters to be introduced in a controlled and safe manner, from which we can provide evidence as to their suitability as a transport mode in Portsmouth. This evidence will inform the DfT's evaluation process as it considers whether to legalise e-scooters for the longer-term following the trials.
- 6.2 The trial supports the ambitions of Portsmouth's adopted Transport Strategy 2021-2038, particularly Policy C. The council's most recent survey indicated 60% of Voi e-scooter trips would otherwise have been made by car or taxi. After just 11 months, and while some parts of the city are not yet well-served by e-scooter availability, it is conservatively estimated that the trial has removed more than 100,000 car trips from Portsmouth's roads and 62 tonnes of CO₂ equivalent from the atmosphere. In terms of local air quality, the trial has already reduced PM2.5 particulate emissions by 9.86kg.
- 6.3 Extending the trial will provide more data and help ensure fluctuations caused by weather, major events, availability in residential areas, and returning users are as fully accounted for as is possible during the trial period.
- 6.4 Extending the trial will allow further evidence collection during a period of reopening following the COVID-19 lockdowns, which is more representative of how people are likely travel around the city in the future.
- 6.5. Extending the trial will help facilitate e-scooter integration into wider FTZ programme schemes including bikeshare, Mobility as a Service (MaaS) and freight micro-consolidation options. It is currently anticipated that MaaS will be launched this spring and bikeshare this summer.
- 6.6 Ending the trial in March 2022 could slow progress towards micromobility achieving its true potential in Portsmouth, as it would remove the opportunity to continue refining the service, including its integration with bikeshare and MaaS, while the DfT continues to evaluate the trials and establish the best legal framework (if any) for legalising e-scooters in future.
- 6.7 Extending the trial would facilitate the ongoing independent data validation commissioned by Solent Transport, which would improve the evidence base and help inform subsequent decisions to be taken about e-scooters at the local and national level.

7. Integrated impact Assessment and Equality Impact Assessment

- 7.1 An Integrated Impact Assessment (IIA) and an Equality Impact Assessment (EIA) were carried out at the trial's commencement and updated versions of both documents are included with this report as Appendix C and D respectively.

7.2 A range of stakeholders were engaged as part of the development of the scheme, and it is the intention to continue this engagement throughout the trial, particularly with the Police and Disability Groups. The IIA and EIA will remain as 'live' documents for the duration of the trial.

8. Legal Implications

8.1 The Vehicle Special Order (VSO) granted to Portsmouth City Council by the DfT has authorised the use of such e-scooters as are approved under the VSO on all roads, including cycle lanes, within the city boundaries. The VSO issued by the DfT currently expires March 31st, 2022. If extension is approved, officers will seek renewal of this VSO until the end of November 2022.

8.2 As Portsmouth's E-Scooter Rental scheme is a trial, an experimental traffic regulation order (ETRO) was put in place. ETROs can last for up to 18 months, so the scheduled end date is September 15th 2022, which encompasses the majority of the additional period proposed for the extension. The most suitable regulatory arrangements to continue the trial beyond September 15th 2022 have not been outlined by the DfT, but Solent Transport is seeking clarity on this matter and coordinating a uniform approach across its trial areas. One possibility under consideration is the conversion of the ETRO to a permanent traffic regulation order (TRO), in accordance with The Local Authorities' Traffic Orders (Procedure) (England and Wales) Regulations 1996. It is likely this will be the most suitable approach in the event that the council seeks to make its trial permanent; any decision to do so would need to be made at a Traffic and Transportation Cabinet Meeting this summer, in which case further legal comments will be provided in the report for that decision.

8.3 Although there is no obligation to consult with the general public before introducing an ETRO, statutory notice must be given if it is intended to make the order permanent and any person may object to the making the order permanent within a period of six months from the date of such notice and any such objection should be taken into account when determining whether or not to make the order permanent when the ETRO expires.

8.4 The Direction of Regeneration has the authority to modify or suspend the Order, or any provision of it if it appears to him essential:

- (a) In the interests of the expeditious, convenient and safe movement of traffic;
- (b) In the interests of providing suitable and adequate on-street parking facilities; or
- (c) For preserving or improving the amenities of the area through which any road affected by the Order runs.

8.5 If it is proposed to place docking stations on the highway opposite private business or residential premises, the owners/occupiers of such premises should be made aware of the proposals and invited to contact the council if they have any concerns. Under the Highways Act 1980, it is necessary to obtain consent of any person having an interest in the proposals before doing so. Notice must be given of the proposal to install the docks and the public given a period of at least 28 days to comment on the proposals. If a valid objection is received during this period, any dock already installed should be removed immediately and steps taken to secure consent before reinstating the docking station.

9. Finance Comments

9.1 Project costs associated with the development and running of the E-Scooter rental trial project will continue to be met by Solent Transport, in accordance with the funding allocated to the trial as part of the FTZ programme. Solent Transport also fund a FTZ Project Manager dedicated to Portsmouth who is coordinating the implementation of the scheme.

9.2 Funding for the extension to November 2022 is included in forecast costs submitted to the Solent Transport Programme Board.

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 Signed by: Tristan Samuels, Director of Regeneration

Appendices:

Appendix A	PCC Wave 2 E-Scooter Survey Appendix A - E scooter rental trial Wave Two opinion survey (Aug 2021 - Sept 2021)
Appendix B	PCC Wave 3 E-Scooter Survey Appendix B - E scooter rental trial Wave Three opinion survey (Dec 2021 - Jan 2022)
Appendix C	Integrated Impact Assessment
Appendix D	Equality Impact Assessment

Background list of documents: Section 100D of the Local Government Act 1972

The following documents disclose facts or matters, which have been relied upon to a material extent by the author in preparing this report:

Title of document	Location
Transport Recovery Plan	https://democracy.portsmouth.gov.uk/ieDecisionDetails.aspx?AllId=13236
Government guidance on e-scooter trials	https://www.gov.uk/guidance/e-scooter-trials-guidance-for-users
Solent Transport Joint Committee papers	https://democracy.portsmouth.gov.uk/documents/g4512/Public%20reports%20pack%2029th-Jun-2020%2011.00%20Solent%20Transport%20Joint%20Committee.pdf?T=10
Portsmouth City Council e-scooter webpage	https://www.portsmouth.gov.uk/ext/parking-travel-and-roads/travel/e-scooters
Electric Scooter Trials & Traffic Signs (Coronavirus) Regulations & General Directions 2020	The Electric Scooter Trials and Traffic Signs (Coronavirus) Regulations and General Directions 2020 (legislation.gov.uk)
Portsmouth E-Scooter Rental Trial Scheme Traffic & Transportation Committee Report (September 2020)	https://democracy.portsmouth.gov.uk/documents/s28007/Portsmouth Rental E-scooter Trial.pdf
Portsmouth E-Scooter Rental Trial Scheme Traffic & Transportation Committee Report (February 2021)	Agenda for Cabinet Member for Traffic & Transportation on Thursday, 25th February, 2021, 4.00 pm Portsmouth City Council
Portsmouth E-Scooter Rental Trial Scheme Traffic & Transportation Committee Report (November 2021)	Agenda for Cabinet Member for Traffic & Transportation on Thursday, 4th November, 2021, 4.00 pm Portsmouth City Council

The recommendation(s) set out above were approved/ approved as amended/ deferred/
rejected by on

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Signed by: