

A woman with long dark hair, wearing a black helmet and a black jacket, is riding a red Voi e-scooter on a paved city street. She is smiling and looking towards the camera. To her right is a classic red British telephone booth with the word 'TELEPHONE' written on its top. The background shows a city street with trees, a black lamppost, and a building with arched windows.

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EUROPEAN LEADER
IN MICRO-MOBILITY

PCC Traffic & Transportation Report

Appendix 2



voi. Voi in numbers

2018

FOUNDED IN SWEDEN

+6m

USERS

0

CLIMATE NEUTRAL SINCE
JANUARY 2020

+30m

SAFE RIDES

50+

CITIES ACROSS
10 COUNTRIES

+85%

LIFECYCLE EMISSIONS
REDUCTION IN 2 YEARS

+500

EMPLOYEES

+20

PUBLIC TRANSPORT &
MAAS PARTNERSHIPS

4.8

USER SATISFACTION RATING
(Highest in the Industry)



voi. We may be new to the UK, but we're growing fast!

Active in **10** UK cities,
growing to **21** cities by
31st March 2021 ¹

+560,000 Safe Trips

+106,000
Active Users in the UK

+3,000 E-scooters
in Operation.
+60% of the total
(4,500) scooters in
operation across the
UK

+1.2m
km travelled

**(equivalent distance from earth to
the moon and back)*

+80,000
car trips avoided on UK
roads since launch

READY TO WORK WITH YOU.

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The Voi Advantage



SUSTAINABILITY

Only vehicle in industry to complete Life Cycle Analysis (by E&Y) - confirming **5 year lifespan for our scooters** and zero emission operations using swappable battery technology. We are proud to offer **carbon neutral mobility**.



SAFETY

Hailing from Sweden, the birthplace of Vision Zero, Voi has adopted its own VZ program, which includes initiatives to promote and incentivize safe behavior, including the **world's first virtual e-scooter traffic school**, training +500k users.



TECHNOLOGY

Sub-meter geo-location through dual band GNSS, SBAS technology and Dead Reckoning. This is implemented in our newest IoT, which we have rolled out across our fleet. We are currently undertaking **pavement rider detection trials**, in partnership with Luna Systems.



COMPLIANCE

Voi's fully integrated **driver's license screening** capability using 'state of the art'-Financial KYC-technology to ensure our riders are compliant with DfT regulations (over and above DfT requirement to include a tick box in app).



OPERATIONAL EFFICIENCY

Thanks to our city rebalancing programme, we get **40% more rides per active scooter than competition**, therefore fewer scooters required to service the same market demand



PARKING INNOVATION

To ensure cities do not suffer from poor parking and clutter, Voi is proud to have developed the **first incentivised parking system** and **rack system to be approved by a blind association**. We have co-designed UK-specific parking racks with the RNIB.



HYPERLOCAL & COLLABORATIVE

Voi is dedicated to working with you and local partners to create a truly unique service designed to solve local transport challenges.



ENFORCEMENT

Voi has developed and pioneered a range of tools to tackle anti-social behaviour, such as our **Ambassador Programme, licence plates and reporting tools** co-developed with local police forces.

voi. UK city testimonials



**Northamptonshire
County Council**

"I have been delighted with their approach, alignment with our ambitions, proactive mindset and commitment to work with local stakeholders.

I have been impressed by Voi's eagerness to work collaboratively to resolve issues as they arise. "



Ian Achurch, Head of External Funding & Partnerships, Northamptonshire County Council



**CAMBRIDGESHIRE & PETERBOROUGH
COMBINED AUTHORITY**

"Right from the outset working with Richard and the Voi family has been remarkable.

We have been impressed by Voi's hyperlocal approach; designing a service that meets the specific mobility needs of our city. Their engagement with key stakeholders, including visually impaired and police, from service design to ongoing operations has helped facilitate a successful launch of e-scooters"



Mehmet Ahmet, Transport Programme Manager at CPCA



**Birmingham
City Council**

"I found the "Voi attitude" to be refreshing.

Voi have a great team spirit and ethos that is diligent, conscientious and committed.

I can only speak highly of the can do attitude and tenacity of the team to shape the product and capabilities to suit our streetscapes and individual requirements.

Would I recommend Voi, absolutely."



Kurt Sullivan, Principal Traffic Officer, Birmingham City Council

voi. UK city testimonials



Transport for West Midlands

"We've been particularly impressed at the rate of technological and operational evolution evident since launch. This coupled with a willingness to work with regional and national organisations such as the Police, RNIB etc has led to a position of much improved confidence in the wider community."

"In Voi we have a mobility partner who will make this scheme a regional success."



Mark Collins, Innovation
Integration Lead, Transport for
West Midlands



LIVERPOOL CITY REGION COMBINED AUTHORITY

"Being a young dynamic company they are very responsive and quick to deliver."

"We have found Voi to be an enthusiastic, flexible, responsible and professional partner to collaborate with for our e-scooter trial."

"Voi are a great partner to choose and will give you every chance for success."



Alex Naughton, Transport Policy
Officer, Liverpool City Region
Combined Authority



"From the outset Voi's commitment and professional approach has shone through."

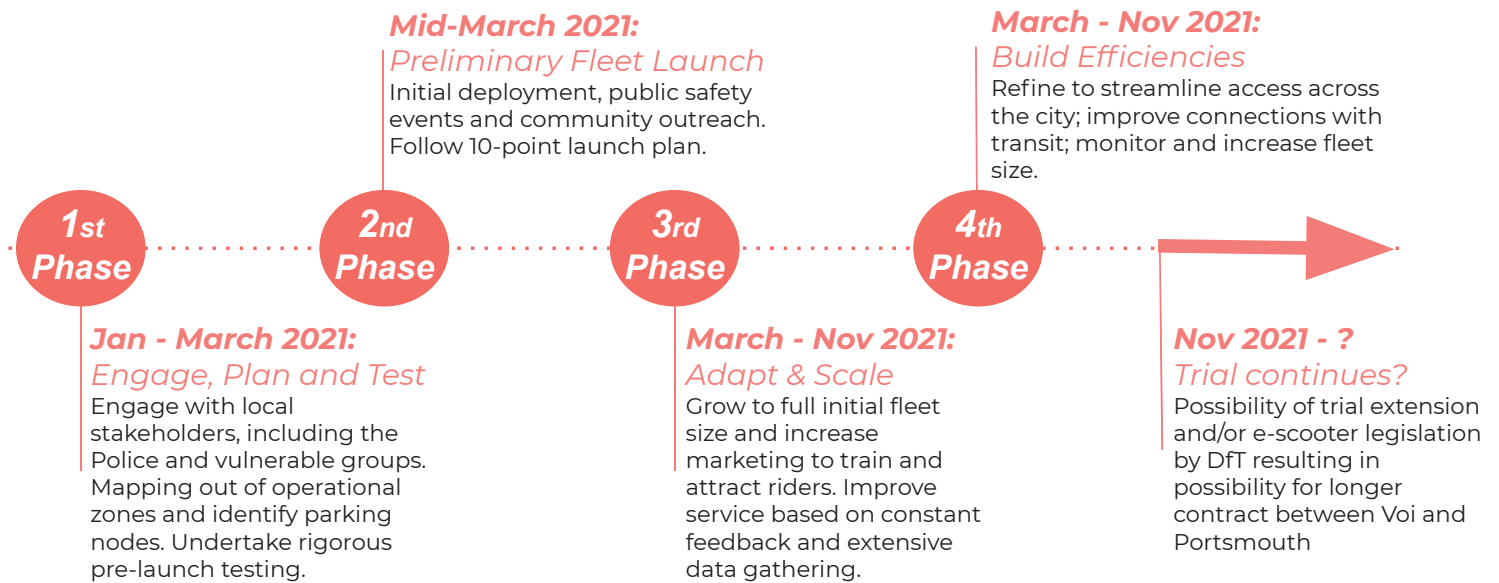
"They've made sure that they understand the differing needs of our region well and they've been flexible and adaptable in tailoring approaches to meet our transport and wider regional objectives. I've been impressed with Voi's approach so far and we're looking forward to continuing to work with them throughout the e-scooter trial period."



Jason Humm, Head of Transport,
West of England Combined
Authority

Mobilisation and scheme development: a phased approach

We scale responsibly and safely, based on utilisation and in close collaboration with the council with ongoing joint evaluation.



Mobilisation: Investing our UK experience

We analysed UK ride data and feedback collected from Councils and local stakeholders to develop the following 10-point launch plan, for safe and successful launches.

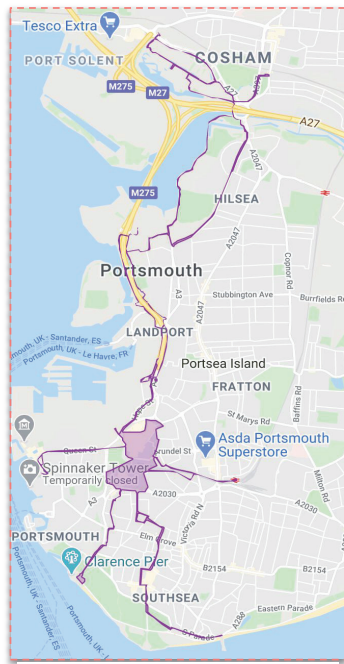
10-Point Launch Plan for Portsmouth

- | | |
|--|--|
| 01 Launch with a conservative fleet size of 100 | 06 Rebalance between 10pm-6am. |
| 02 Limited number of parking zones at launch | 07 Adapt operating window to NHS shifts |
| 03 Test-ride geofences prior to launch. | 08 Respond to hotspots. |
| 04 Limit max. speed to 10 mph in first month. | 09 Be tactical with infrastructure. |
| 05 Educate online via Voi e-driving school. | 10 Scale sensibly in line with demand |

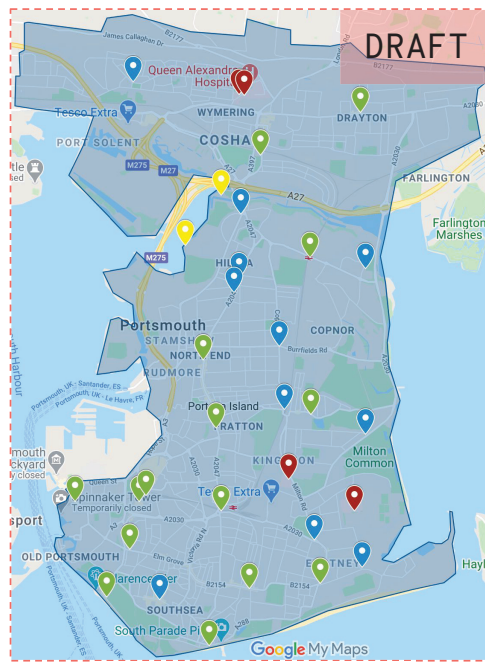
At Launch: Focus on 'essential travel' supporting travel for Key Workers to and from key points of interest (e.g. hospital to transport hub / city centre)

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Preferred routes and proposed launch operating area



Preferred routes

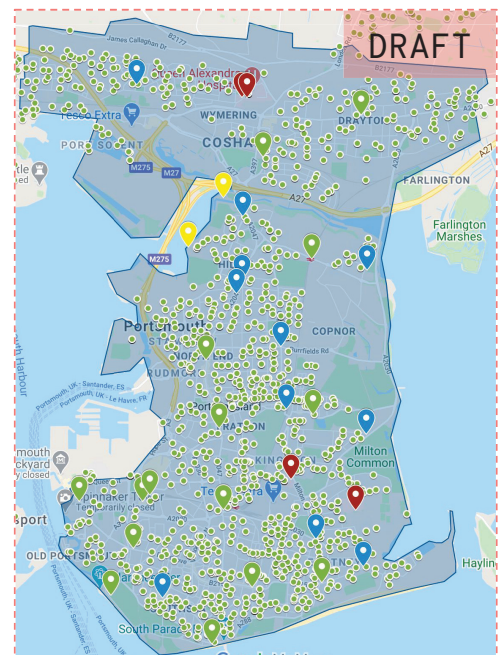


Launch proposal

Parking hub key:
Green: Location agreed
Yellow/blue: Under review
Red: Hospital locations

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- Servicing **all** NHS workers in Portsmouth with free rides for essential travel
- Lower e-scooter density (clutter) per km² during the launch phase to allow the public and transport providers to get familiar with the e-scooters
- More parking options → more journeys → higher adoption → **modal shift**
- Sets the scene for further phases with more e-scooters and more hubs



NHS Workers residences and proposed hubs

voi. Voi's operations

Advanced geofencing for safe and responsible use

Accurate geofencing enables us to meet restrictions set by DfT and councils.

Voi uses **industry-leading GPS** and a proprietary **4G IoT** (communications module) to support geofencing.

Geofenced zones to guide safe and compliant use.



No riding zones

where users are not allowed to use the scooter (e.g. pavement, parks and cemeteries)



Slow speed zones

where speed is reduced (e.g. near bodies of water, busy areas)



No parking zones

to protect other road and urban space users (e.g. pedestrian areas, parks, pavements)



Incentivised parking zones

to guide parking to dedicated zones. Users are provided a discount when they successfully end a ride in these areas.



Mandatory parking zones

to mandate parking in certain hubs (equivalent to docking model).



Operating zone

operational area for the service and trial.

voi. Portsmouth stakeholder engagement

Voi engages with a variety of key city stakeholders

Voi regularly engages with various stakeholder groups in the Portsmouth & Solent region.

These sessions are intended to drive awareness of Voi's operations and collaborate with external stakeholders, including vulnerable groups, emergency services and landowners.

Vulnerable/equalities groups

- Engagement session with local cycling/walking groups on 20 January, positive session with representatives from Portsmouth Cycle Forum, Portsmouth Friends of the Earth, Sustrans and Cycling UK
- Update to Portsmouth Visually Impaired Action Group (VIAG) presented by PCC representative, trial information shared with Portsmouth Disability Forum and MAKE (Aldingbourne Trust); ongoing dialogue to continue

Emergency services

- Kick-off meeting held with Marcus Kennedy from Hampshire Constabulary to introduce to Voi. Recurring sessions to be arranged to drive close engagement towards the trial launch
- Introductory session held with Hampshire Fire & Rescue Service, site visit of Voi warehouse to be arranged when site confirmed

Landowners & businesses

- Stakeholder briefings being undertaken with Solent NHS Trust 8 February and previously engaged with Portsmouth Hospitals NHS Trust
- Voi & PCC presented to Portsmouth University, transport companies including Gosport Ferry & Hovertravel, Portsmouth International Port, Stagecoach South, & FirstGroup
- PCC licencing team briefing undertaken with regards to taxi/private hire trade in Portsmouth (meeting with taxi trade to be arranged shortly)

voi. **Voi E-Scooters**



Voiager 3X

Voi's current e-scooter model, the Voiager 3X, is the most advanced, safest, and sustainable e-scooter model in the market.

Voi is the first e-scooter operator to conduct a full independent [Life Cycle Analysis](#), by Ernst & Young (EY). This report verified that Voi's e-scooter have a lifespan up to 5 years and has yielded over **71% reduction in emissions since January 2019.**

13. VOI : EUROPEAN LEADER IN MICRO-MOBILITY



Voiager 3X Vehicle Spec

- 60 mile range / 5 year lifespan
- Max speed 15.5mph / 500W power / 15% slope
- Swappable battery
- Beacon to show availability
- Double hydraulic suspension for smoother rides
- Dual kickstand
- Dual Braking system
- 4G connection for faster unlocking/locking.
- Advanced GPS

DfT Compliant

Voi has submitted applications for a Vehicle Special Order (VSO) to the Department for Transport (DfT) for 3 e-scooter models, which have **ALL been approved**.

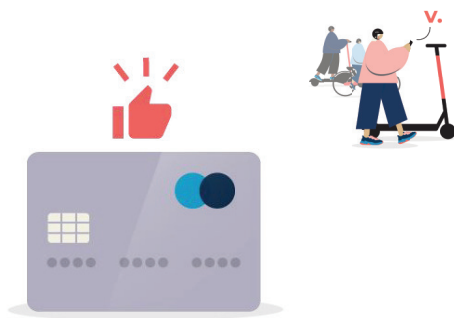


voi. Physical infrastructure

- Voi strongly supports the installation of physical infrastructure at Portsmouth mandatory parking hubs. This includes parking racks and floor vinyls.
- Why use parking racks or floor vinyl?
 - **Positive effect of parking behaviour** (*improve parking compliance by up to 65%*)
 - **Visibility is key** (*Users willing to walk extra meters when parking racks easily visible*)
 - **Non-users show a positive attitude** towards parking racks (*surveys conducted by Norwegian Institute of Transport Economics*)
- **Voi to cover ALL infrastructure costs required in Portsmouth to ensure e-scooter parking meet your requirements**



voi. Pricing model



Pay-as-you-go

£0.99 to unlock

£0.14/minute.

Subscription Packages

Day Pass: £5

Monthly Pass: £40

Voi-4-All

Monthly Pass: £10.00 (75% discount)

Voi Students

Monthly Pass: £32.00 (20% discount)

Voi Heroes

Free travel for all NHS / emergency service workers throughout lockdown (75% discount thereafter)

Voi for Business

Volume discounts via B2B platform

Voi Cardless

Gift-cards available at distribution points

At Voi we're democratising mobility with a range of inclusive and accessible price plans. Unlimited travel for as low as £1.83/day (or 46p/day for low income users)



Health & Safety

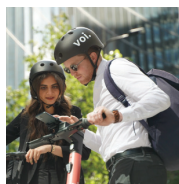
We invest heavily in **educating users** and **fostering safe adoption**.



Education - Voi has invested over £1.5m training riders via the world's first accredited e-scooter training school. +500k users have passed the test. Voi will **invest +£70k on incentives** to get riders to pass the test in Portsmouth. Voi partners with Iam RoadSmart and AA on rider training.



Rider Screening - Voi's fully integrated **driver's license screening** capability using 'state of the art'-Financial KYC-technology to ensure our riders are compliant with DfT regulations (over and above DfT requirement to include a tick box in app)



Insurance - Voi to provide **fully comprehensive** motor vehicle insurance for riders (over and above DfT requirements for 3rd Party Liability cover)



Awareness campaigns & community engagement -

Voi to **invest +£27k on advertising initiatives** to promote safe riding and parking. Voi will invest **+£32k to host monthly safety events** in Portsmouth to engage with local communities via our Voi Club. We welcome joint communication with the CA:



Drunk rider prevention - Voi is developing the world's first in-app **drunk rider prevention system**. The feature (that includes a series of puzzles to complete by the rider) will be operational during evenings and weekend and is being piloted to reduce drunk users from using the service.



Free helmets - Riders can request a free helmet any time from Voi. Pick up locations will be spread across each city we operate in to ensure everyone has access to a helmet. **Voi will distribute 5,000 free helmets throughout Portsmouth during this trial.** USers will also receive a discount for wearing a helmet via the **"helmet selfie"** feature on the app.

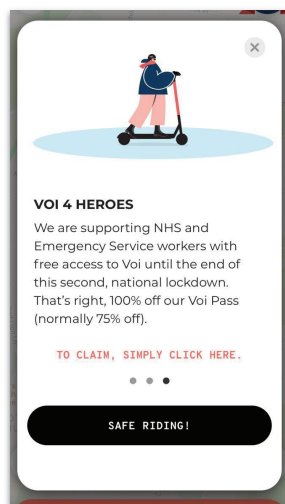
Stringent sanitary measures for COVID-19

During the COVID outbreak, Voi immediately implemented strict sanitary measures to mitigate contagion risks for our users and employees.

We are proud to have maintained a fully operational service, to help facilitate safe travel, particularly for key workers.

This has been a huge success, illustrated by an average utilisation rate of >7.7 rides per vehicle per day in Liverpool during lockdown.

17. VOI : EUROPEAN LEADER IN MICRO-MOBILITY



Anti-microbial handlebars

We currently affix Shieldex® Copper-Tape tape on our handlebars. Exposure to copper inactivates 99.98% of Coronaviruses in minutes irreversibly. All of our V4 e-scooters will have built in antimicrobial handlebars.

Ensured service hygiene protocols reduce risk of contagion.

- Scooters are disinfected 2x a day
- Operational teams wear mandatory PPE (masks & gloves)
- In-app COVID-19 information.
- Parking racks equipped with hand sanitiser dispensers



Supporting key workers and local businesses

- Free rides for NHS and Emergency Service workers (Voi-4 Heroes)
- Support for local business and restaurant delivery.
- #WeAllMove. Voi is the official partner with the World Economic Forum, supporting safe recovery across Europe.

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Enforcement

Mitigating Anti-Social Behaviour

Through our unmatched experience in the UK, we have developed a range of tools to tackle anti-social behaviour, and prevent the misuse of our e-scooters.

We recognise that technology alone cannot solve these issues, and therefore have invested significantly in initiatives such as our Ambassador Program, as well as in extensive collaboration with local police.



- Ambassador Program
- Provide one-on-one education, distribute safety materials and free helmets, encourage users to complete traffic school
 - Rebalance abandoned/ wrongly-parked scooters
 - Report misuse and illegal behaviour

Collaboration with Law Enforcement

- Weekly meetings with police to establish protocols for dealing with misuse/criminal activity.
- Police representative accompanies Voi team during pre-launch site visits
- Co-develop reporting tools to facilitate data sharing and enforcement



- Reporting Misuse
- Anyone can report a wrongly parked scooter or risky behaviour using their phone or online support channels.
 - All e-scooters are equipped with unique registration numbers to enable easy reporting
 - Users receive a £25 fine for parking outside of the operational zone.

#citiesforpeople #getmagicwheels #carbonneutral

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Voi actively supports the United Nations



SUSTAINABLE
DEVELOPMENT

GOALS