

Recommendations for Solent Transport's Future Transport Zone in response to COVID-19

May 2020

Executive Summary

The Future Transport Zone funding offers Solent Transport a significant opportunity to reduce congestion, car dependency, poor air quality, low physical activity and the impact of movement of goods by road. Throughout Atkins' investigation and intelligence gathering, it has become apparent that much of what the Future Transport Zone sets out to achieve can contribute to the COVID-19 recovery. The primary aim of the COVID-19 recovery, from a transport perspective, **is to prevent a permanent, large scale return to the private vehicle by individuals as travel begins to increase**. If the FTZ is not approached correctly in the current Public Health context, then there is a significant risk of only delivering only minimal benefits, but if approached with **strong governance, flexibility and agility** the FTZ funding perhaps offers greater opportunity than previously envisaged.

The risk profile of delivering the Future Transport Zone has changed and therefore given the urgent need for interventions, recommendations have been chosen which can with some certainty support both the FTZ response and COVID-19 recovery, within the constraints of outcomes, time and budget. In light of this, we have offered recommendations as to whether projects should be **reset, reconfigured or reinvented** based on whether the evidence suggests in their current format they are feasible and support the COVID-19 recovery.

For the overall programme we have identified that the **mobilisation of FTZ projects should begin in order to maximise the current opportunity**. To achieve this, **strong governance** must be put in place, with objectives set out and clear project plans that **maintain safety and enable flexibility** in the current circumstances and given the uncertain short-medium term future.

The Drones project (Project 1, Theme 2) offers an example of advancing a programme in order to respond to the current context. Through increasing the resource and bringing this project forward findings that can bring benefit in particular to the NHS during this time are being uncovered quickly.

Within the personal mobility programme (Theme 1) **the two 'quick wins' that would benefit the Covid-19 response the most are the bike/e-bike hire scheme and e-scooter trials**. These can both be developed on the premise that during the COVID-19 response they can have some impact in minimising a return to the private vehicle. In order to maximise their potential, aligned to the COVID-19 response, the geographies of each should be carefully considered as previous assumptions around basing these at Public Transport interchanges may no longer stand true. Consideration should be given to the possibility of **enhancing these projects by diverting resource** from schemes with lower potential in the changed circumstances.

The COVID 19 response provides a backdrop for **Mobility as a Service** to provide **benefits around improved information, advice and facilitation for the customer**. Implementation and procurement determine how quickly a MaaS platform can move to 'go-live' and it is suggested a clear strategy for these is established through stakeholder engagement and soft-market testing. Dependent on findings procurement may begin so the MaaS programme can be in place for the medium term (operational in 2021) when usage is likely to increase. The nature of the MaaS trials means these should be delayed until the research findings can be better more robust and in the meantime the App developed and rolled out to the public. Funds should be reallocated from the university trials to the platform and app development to support this approach.

Public transport is likely to suffer disproportionately during the pandemic and will require support in the medium term to aid its recovery. There is a short-term opportunity for implementation of the planned Solent Go carnet tickets to make it a more relevant offer to dovetail with the anticipated changes in travel behaviour arising from increased flexible and home working, reduced 9-5 commuting and 'virtual' meetings.

Theme 2 also offers opportunities: home deliveries of various types have seen a huge increase in particular. Alongside the drone project, the micro-consolidation project offers opportunities in the current context. These project's elements should be prioritised during the Covid-19 recovery period, particularly focussing on the last mile delivery element and the addition of a significant delivery partner to aid this.

Reallocation of funds from the DDRT and Lift share projects should be considered to release additional funds for higher priority projects.

A summary of the key actions is identified below for **Solent Transport to successfully develop their Future Transport Zone**, while ensuring the current context is considered and opportunities maximised. The coloured text demonstrates the prioritisation around elements of the project.

Overall FTZ Programme Mobilisation

Deliver a successful Future Transport Zone and support a COVID-19 recovery

- Identify clear objectives
- Setup strong governance
- Programme Initiation Document
- Maintain flexibility and agility
- Manage identified risks

Bike share

Reconfigure

- **Bring forward and implement bikeshare schemes**
- Review planned location of bikes with new travel flows in mind and the use of flexible schemes such as mobile container-based docks

MaaS Platform

Reconfigure

- **Soft market testing to confirm timescales and requirements**
- Initiate procurement process

Mobility Credits

Reset

- Pause progression of Mobility Credits project, until MaaS App is ready and environment more stable

Macro-Consolidation

Reset

- Delay start of the programme due to available resource
- Kick programme off at the beginning of year 2

DDRT

Reinvent

- Serious uncertainty re DDRT viability
- Delay commencement; significantly de-scope and consider entirely removing from FTZ and re-allocating funding
- This could be reconsidered if the market conditions change

E-Scooter

Reconfigure

- **Continue developing proposal for a park and ride trial**
- Continue engaging with providers to begin understanding capacity and available numbers of scooters

Micro-Consolidation

Reconfigure

- **Bring last mile trials forward in the programme**
- Maintain original timescales

Solent Go

Reconfigure

- **Prioritise carnet tickets on existing Solent Go formats**
- Bus operators to be involved in MaaS Platform requirements

Lift Share

Reinvent

- Delay launch of workplace schemes till the medium term
- If workplace schemes are unsuccessful re-allocate funds to priority areas

MaaS Trials

Reinvent

- Pause until testing environment more stable and likely to yield proposed benefits
- MaaS app to be launched and trialled with the public once ready and use the university trials to test specifics
- Some funding should be re-allocated to the platform development and app launch marketing

Notice

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This document has 38 pages including the cover.

Document history

Revision	Purpose description	Originated	Checked	Reviewed	Authorised	Date
Rev 1.0	Draft for Solent Transport review	GB	EC	NW	TB	12/05/2020
Rev 2	For Solent Transport review	NW	GB	EC	TB	19/05/2020
Rev 3	For Solent Transport review	NW	GB	EC	TB	28/05/2020

Client signoff

Client	Solent Transport
Project	Solent FTZ COVID-19 Impacts
Project No.	5197583
Client signature / date	

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1. Context

In March 2020 the Department for Transport (DfT) awarded £29m of funding for the Solent Future Transport Zone (FTZ). The FTZ programme was then delayed as the UK was placed into ‘lockdown’ in response to the COVID-19 pandemic. During this pause, Solent Transport has conducted a review of the FTZ programme to ensure it remains fit for purpose, considering: feasibility; ability to deliver; and the validity of the proposals against a changed landscape. This report summarises the key findings of this review which will be fed back to DfT and used to frame the future deployment of the programme. This recommendations document should be read in light of the Thought Piece (COVID-19: Catalyst or Catastrophe for the Future of Mobility) which sets out that **if the Solent FTZ programme moves quickly and remains agile, it can both support a COVID-19 recovery while maintaining the initial objectives of the FTZ.**

Table 1-1 - FTZ and COVID-19 recovery objectives

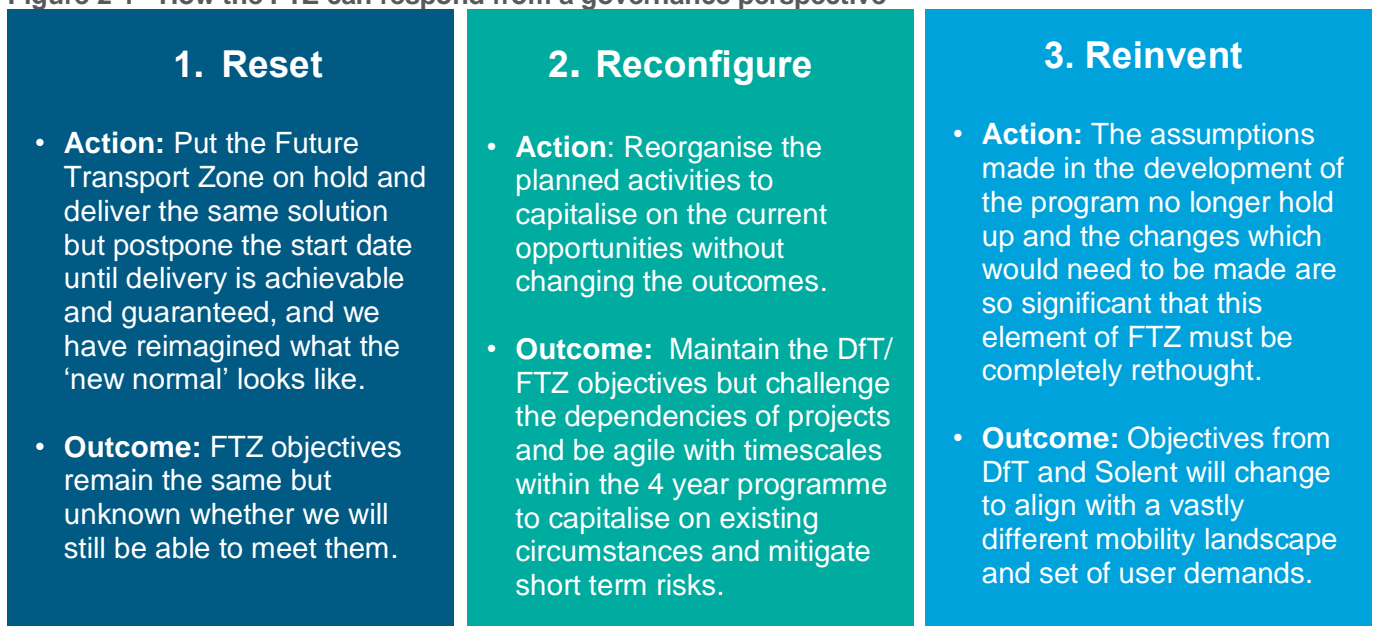
Original focus	Intervention/Objective	Aligns with FTZ	Aligns with COVID-19 response
FTZ	Reduce car dependency	✓	✓
	Improved air quality	✓	✓
	Increase productivity	✓	✓
	Increase physical activity	✓	✓
	Addressing the impact of movement of goods by road	✓	✓
COVID-19	Ensure Public Transport is not a high-risk environment for COVID-19		✓
	Maximise opportunity to shift to walking/bikes/cycle share/e-scooters	✓	✓
	Explore new models for buses	✓	✓
	Provide better information for individuals around public transport e.g. crowding/times of operation	✓	✓

The project proposals and programme developed for the FTZ funding application were written in a context which has changed dramatically due to the COVID-19 pandemic and the subsequent travel restrictions and social distancing measures introduced. While the future is uncertain, by considering the response from other countries who are further ahead in their recovery from COVID-19 and other similar events, we can make some assumptions, which have been documented within our Thought Piece. What we consider to be normal, is expected to change in phases as we progress from ‘lockdown relaxation’ to a ‘recovery phase’ and then the new normal’, typified by a wide rollout of a vaccine when the personal threat of COVID-19 is expected to be greatly reduced.

2. Approach

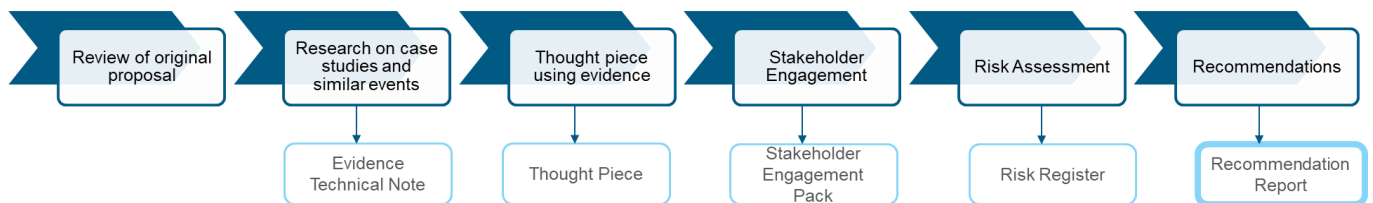
Given the changed context, a review of the FTZ objectives set out by the DfT and Solent Transport was conducted. The original proposal has also been reviewed to understand whether the projects’ objectives remain appropriate and the intended outcomes are achievable over the 4-year funding window. We have considered 3 broad recommendations when reviewing each project: reset; reconfigure; or reinvent, as summarised below:

Figure 2-1 - How the FTZ can respond from a governance perspective



To derive recommendations, Atkins undertook the activities as summarised in Figure 2-2:

Figure 2-2 - Project Approach and Deliverables



Consultation with the project partners and broader stakeholders, including potential suppliers, was crucial. It was instrumental in establishing the high-level Risk Register (see Appendix), which summarises the potential direct impacts on FTZ of COVID-19 and, perhaps more importantly, the available mitigations (and opportunities) that arise. The Risk Register provides a conduit through to this report and our recommendations for moving forward.

A summary of the stakeholders we engaged with can be found below. Given the time restraints, there was a limit to the number of stakeholders who could be engaged.

Table 2-1 - Overview of stakeholders

Organisation	Theme	Subject	Contact
University of Southampton	Personal Mobility	Research	James Pritchard John Preston
University of Southampton	Personal Mobility	University as a testbed	Adam Tewkesbury James Pritchard
University of Southampton	Freight and logistics	Impacts of COVID-19 on Theme 2	Tom Cherrett

University of Portsmouth	Personal Mobility	Research and university as a testbed	Djamila Ouelhadj
Moovit	Personal Mobility	MaaS platform	Brad Lee
Mobilio	Personal Mobility	MaaS platform	Ross Basnett
Enterprise Holdings	Personal Mobility	MaaS offering/ car share	Oz Choudhri
Brompton Bike	Personal Mobility	Bike/e-bike share	Julian Scriven
Trafi	Personal Mobility	MaaS platform	Damian Bown
Shotl	Personal Mobility	DDRT platform	Gerard Martret
Hampshire County Council	Freight and Logics Personal Mobility	Future of bus operation	Andrew Wilson
South Hampshire Bus Operators Association (SHBOA)	Personal Mobility	Solent Go enhancements and future bus operations	Richard Soper
South Western Railway (SWR)	Personal Mobility	Solent Go enhancements and future rail operations	Phil Dominey Tony Dickenson

3. Overall Programme

The overall programme has been delayed significantly, having initially been due to start in January 2020. The expected start date is now July 2020. There are numerous recommendations that have arisen out of the activities described above, and a number of activities that are essential to start quickly in order to aid the response to COVID-19.

In order to maintain and deliver an effective FTZ in the unprecedented Public Health context a **flexible and agile approach** is required. By this, we mean revisiting and re-identifying the key objectives for FTZ and adapting our approach to achieving these in response to shifting external factors and changing priorities, including:

- Understanding dual-objectives that support both a COVID-19 recovery and a Future Transport Zone, ensuring Solent Transport respond quickly to maximise this without compromising the FTZ
- Modal split is unknown so maintaining the ability to add/change modes as behaviours adapt
- User engagement and seeking to push elements of this back in the programme.

Our recommendation is that **FTZ can be safely and effectively mobilised within the current context** to deliver a world leading Future Transport Zone. In order to do this the following should be considered:

Set up governance

As highlighted within the Risk Register and above, we are within a time of higher risk and **therefore need to retain flexibility and agility**. This should be supported **by strong governance ideally steered by a dedicated programme management resource or organisation**. A recommended starting point is to establish communications processes and reporting lines between partners and develop a programme initiation document (PID). The PID will clarify roles and responsibilities to ensure the programme is set up for successful delivery. The entire programme needs re-baselining according to:

- Evolved objectives of the FTZ
- New timelines for delivery
- New/different projects to include
- Finances
- Maximising and moving elements of the programme forward/back based on the current context

Governance must include and allow for contingency, succession planning and clear points of contact given the current circumstances. The recommendations made within this report are designed to form the basis of the PID.

Resourcing

Resourcing is a significant risk that has increased due to the new context. Initial plans to hire a team of 9-10 staff through a combination of full-time new recruits, seconded staff and partner organisations (academia and consultants) are likely to change. Through examination, partner organisations have shown to be ready to respond to the challenges of supporting the FTZ launch remotely but in the current context both recruitment and secondments may be more challenging. In order to move quickly yet remain agile Solent Transport need to focus on identifying extra resource who are able to mobilise and respond quickly to the challenges that the FTZ and COVID-19 recovery required.

Stakeholder communications

Feedback from some stakeholders suggested that the frequency of communication and level of detail shared with delivery partners regarding timescales and preparation activities has been less than desired. This is partly due to clarity on this information not being available to Solent Transport. In order to minimise the risk of partner disengagement, an engagement plan should be developed as a priority for the partners as part of the overall governance.

Procurement

One of the longest timescales identified is the procurement activities. In order to maximise any opportunities within the current context it is essential that the longer procurement activities begin as soon as possible. Flexibility will be required in any procurement so that all technology platforms can flex to respond to different challenges for their users over the next period. A review of the procurement approach and understanding the current relaxation in rules could prove beneficial to speed up a number of the procurement processes that need to be undertaken.

Our findings highlight that the market is ready to respond to the demands of Future Transport Zone. Many of the companies engaged with have developed innovative solutions to adapt in this time, including supporting the journeys of key workers, providing adapted information to the public and adapting commercial models. They are ready to respond to a procurement process and, given the harder economic times, welcome the opportunity that FTZ offers to stimulate the marketplace. This may lead to more competitive prices and also an opportunity for Solent Transport to make the most of relaxed procurement rules, if supporting a COVID-19 recovery.

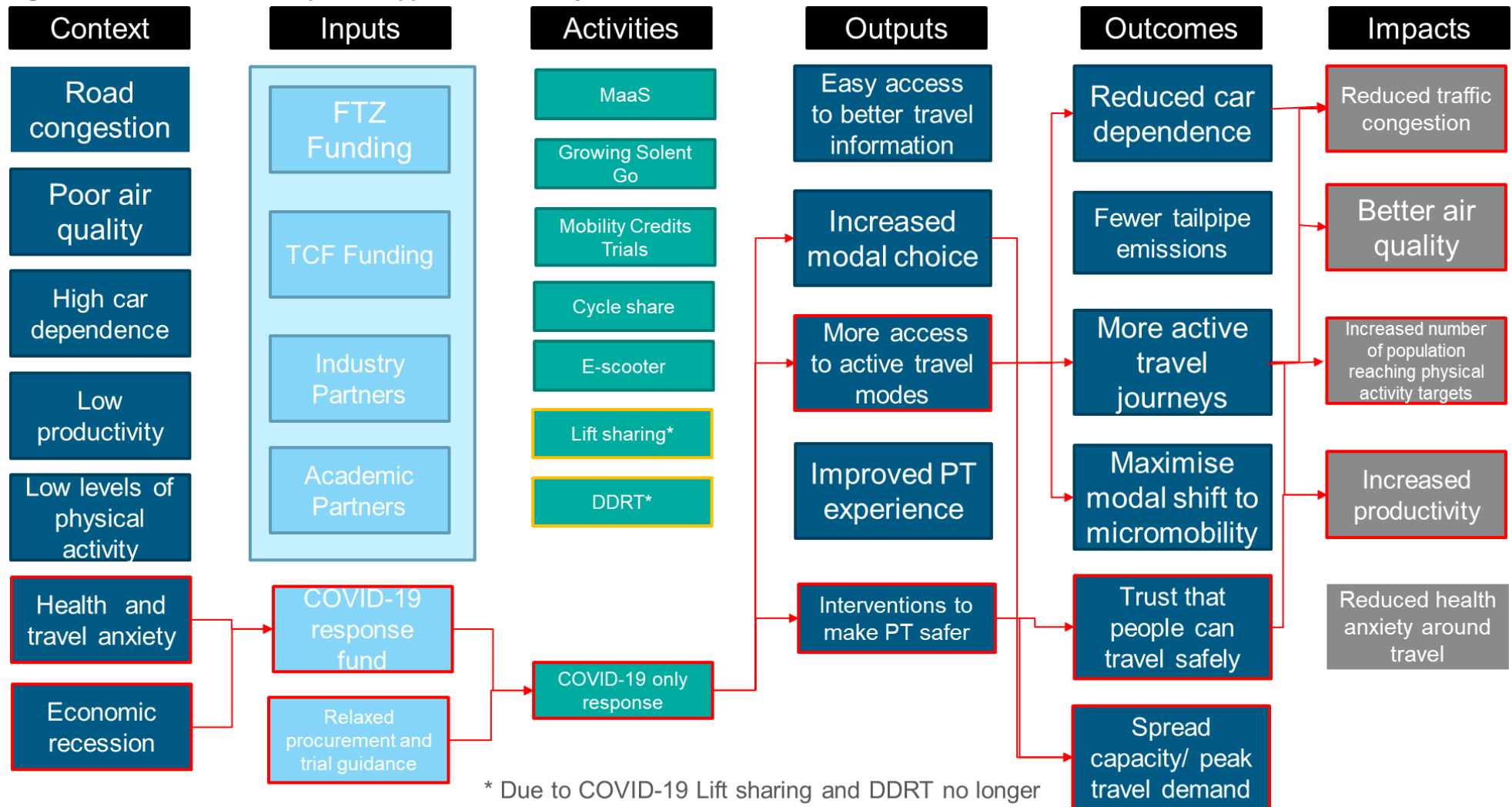
Remote working

We have produced a supporting note to highlight how tools could support the remote delivery of the Future Transport Zone. It is important to note that each of the key partners has access to Microsoft Teams which has powerful functionality. Although partners have different challenges, they all showed an eagerness to respond to the Future Transport Zone. When tested, both the partners and marketplace had strong business resilience and continuity planning in place to respond to the challenges that the current context offers as well as the ability to adapt for further unforeseen delays e.g. a second peak. In light of this we suggest that remote working does not need to hinder activities that can be undertaken, even between organisations, to support delivery of the FTZ.

Logic Mapping

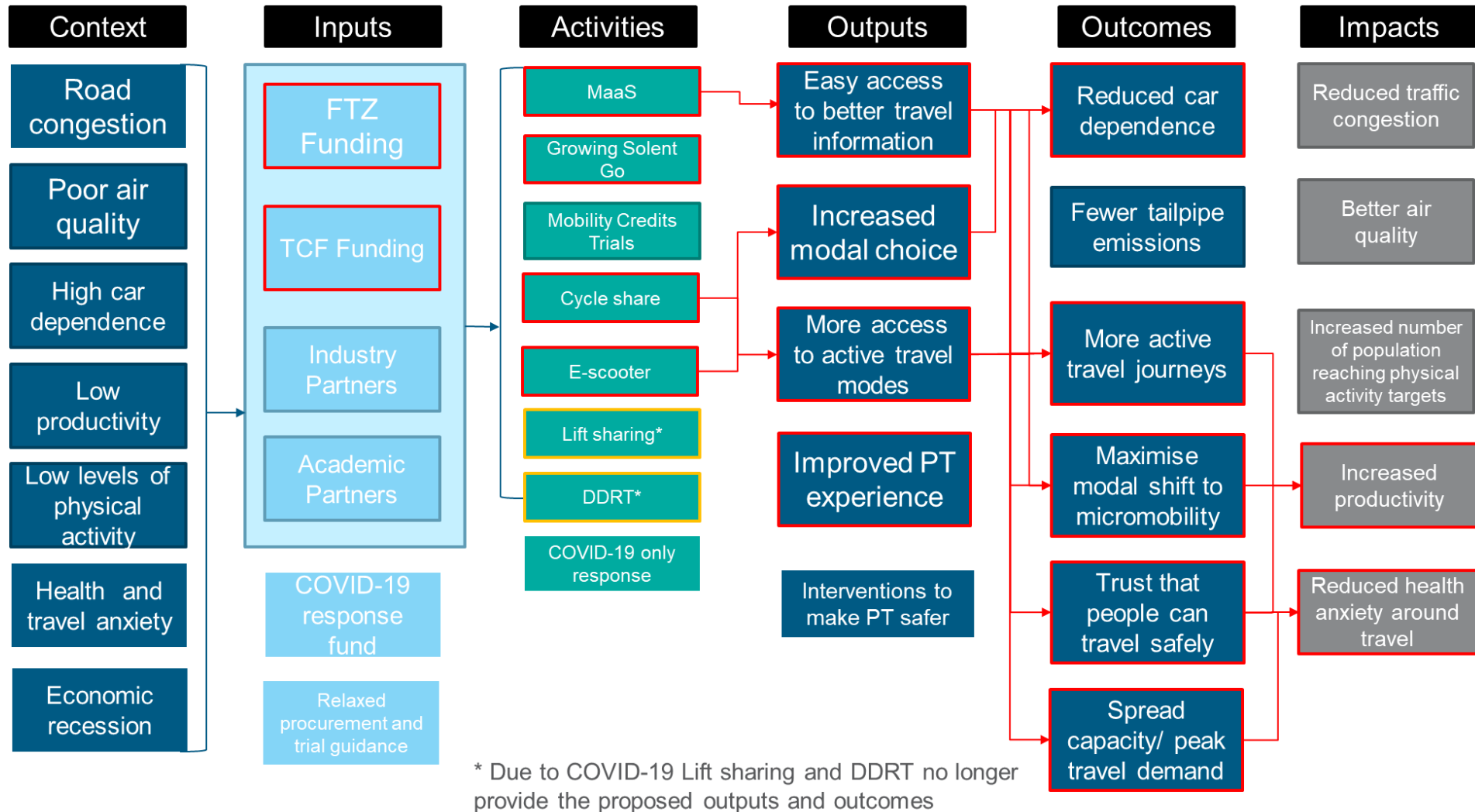
As part of the bidding phase logic maps were used to identify and link context and inputs to outcomes for Theme 1. We envisage that Theme 2 logic maps may remain similar, other than an increased importance and quantity of home-deliveries. To continue this, within Figure 3-1 and Figure 3-2 we have identified through a logic map both how the COVID-19 recovery is able to support the FTZ and the FTZ at a programme level supports the COVID-19 recovery. In order to keep these readable, each Figure only highlights the key linkages between each element for either the COVID-19 response supporting the FTZ programme or vice versa.

Figure 3-1 - How COVID-19 response supports the FTZ Objectives



* Due to COVID-19 Lift sharing and DDRT no longer provide the proposed outputs and outcomes

Figure 3-2 - How FTZ Programme supports the COVID-19 response



4. FTZ Programme Elements

The individual projects of the FTZ programme were reviewed and evaluated in line with the Risk Register. A SWOT analysis was conducted for each, assessing the options for adapting the original proposals in line with the new COVID-19 context.

4.1. Mobility as a Service (MaaS)

Mobility as a Service is the cornerstone of Solent Transport's Theme 1: Personal Mobility. The platform will integrate the planning, booking and payment of existing modes in addition to new modes which will be introduced throughout the FTZ programme. New modes will include bike/e-bike sharing schemes and e-scooters. MaaS trials using the University of Southampton and the University of Portsmouth as testbeds were proposed to test and tailor the platform to the Solent market. Since the platform development and MaaS product launch are not dependent on the trials, MaaS has been separated into the platform itself and the trials at the universities when considering the impacts of COVID-19 on the programme.

The overall aim for the MaaS platform and trials was to deliver an example of:

Setting best practice for MaaS in a way which **works for all stakeholders** in a **car dependent context**, generating knowledge and insights for DfT which could support **roll-out** of a national approach to MaaS.

4.1.1. MaaS platform

An overview

The MaaS platform will offer information, advice and facilitation to transport users via a smartphone application. The capabilities of the platform will be outlined in a specification, and there are opportunities to work with suppliers during procurement and implementation phases to tailor these capabilities to the current COVID-19 context and futureproof for new scenarios.

COVID-19 response

The SWOT analysis of delivering a MaaS platform in the context of the COVID-19 recovery phase is displayed below.

Figure 4-1 - SWOT analysis - MaaS platform

Strengths

- Provides people with access to required information, advice and facilitation of journeys
- Platform providers are able to work remotely and have examples of doing so for international clients
- Existing services can be integrated immediately
- Offers a platform for Solent Transport to push notifications to customers to give travel advice

Weaknesses

- Potentially requires long procurement process
- Even a white label app will take months to get commercial agreement and requires compatibility with other back off systems which may require significant development time.

Opportunities

- New user groups will want access to information and advice on safe travel in real time.
- Opportunity to build upon individuals greater familiarity of digital processes such as NHS tracing app and teleconferencing
- Opportunity to incorporate capacity management
- Opportunity to incorporate test and tracking app
- May help to give confidence to people to continue taking Public Transport
- Mobility credits can be used to get people back into jobs
- Flexible pricing can be used to flatten rush hours

Threats

- Existing service providers e.g. bus operators may not have time/interest to collaborate
- Car dependency is very high and people cannot be convinced to use other modes
- Platform providers may be responding to all FTZ tenders at a similar time which could put pressure on the timescales
- MaaS trials will need to be adapted to new context and may have to occur post product launch.

Stakeholder engagement

We engaged with 3 MaaS platform providers Trafi, Moovit and Mobbileo to inform our recommendations from a supplier viewpoint. Justification for engaging with each of the specific supplier and minutes from our conference calls are available in our Stakeholder engagement document and a summary can be found in 6.1. Appendix A A.1.

Our recommendations

Reconfigure

There is a real opportunity to launch the app to the public towards the end of the recovery phase/start of “new normal” to encourage and enable appropriate travel and instil trust in the use of alternative modes to the private car thus mitigating surges in car usage. The limiting factor for this will be time for procurement, design and implementation. A better understanding around these are required to identify how quickly and effectively a MaaS solution can support the COVID-19 response.

As our thought piece suggests a MaaS platform must provide:

- Information
- Advice
- Facilitation

This does not change in the current context and therefore as long as these purposes are achieved, and any platform maintains the flexibility to provide a range of information and advice and different facilitation methods, this activity should continue.

The opportunities to add additional capabilities to the platform such as live occupancy data would need to be addressed in the specification and the complexities considered but could be developed throughout the life of the FTZ funding.

Table 4-1 - Recommendations - MaaS Platform

#	Recommendation	Justification	Outcome	Start Timescale	Impact/ Completion timescale
1	Conduct soft market testing	This will focus on better understanding the timescales around development and implementation and specifying newer elements within the specification e.g. crowding information. It should also focus on engagement with operators to understand the data that is available to inform/advise the public with.	Survey of market capabilities could feed into potential to revised timescales for the MaaS project, particularly if it discovers data/ capabilities which means MaaS could be delivered earlier in the recovery phase.	Short term	Short term
2	Dependent on the soft-market testing, review the procurement of the MaaS platform and identify/explore any approaches to speed this up	The launch of the MaaS app will have direct benefits to the COVID-19 response by facilitating safe travel on alternative modes to the private car. Other projects within Theme 1 are dependent or will be strengthened	MaaS can be dual-purposed to help the COVID-19 response and meet FTZ objective, dependent on the timescales identified within Recommendation 1.	Short term	Medium term

		by the timely procurement of the MaaS platform.			
3	Ensure that the tender emphasises the need for flexibility of the platform to perform different roles as we go through the post-pandemic phases	The MaaS application has the ability to aid the response to COVID-19, likely towards the end of the recovery phase/start of new-normal by providing residents with up-to-date travel information and advice. As we establish a 'New Normal', user requirements and preferences such as the type of modes available and motives for travelling will change, so the platform needs to adapt and respond to the changing user needs to ensure that it <i>works for all stakeholders</i> .	MaaS platform will remain relevant and has greater chance of being successful beyond the FTZ funding. This is an important element of <i>setting best practice</i> .	Short term	Medium term
4	Provide the public with access to the MaaS app prior to the University trials	The original scope set out to slowly increase the number of participants with access to a MaaS app. White labelled MaaS platforms have improved significantly and many are ready to be rolled out with little tailoring to provide the basic MaaS capabilities to inform, advise and facilitate journeys. MaaS platforms also incur a significant cost, so by increasing the number of participants, the greater the impact you can achieve for the investment. The university trials should be postponed (see 4.1.2).	The public can begin to experience the benefits of MaaS from as early as 6 months from procurement.	Medium Term	Medium/ Long Term

4.1.2. University MaaS Trials

An overview

The trialling of the Mobility as a Service application was a vital part of the MaaS development proposal. The original plan consisted on 4 phases, with Phase 0 commencing in September 2020 in line with the start of the university term:

- **Phase 0** – Trial development and procurement
- **Phase 1** – Small scale university trials

- **Phase 2** – Scaling up of the trials
- **Phase 3** – Full implementation across Solent region

The University of Southampton and the University of Portsmouth play vital roles in two aspects of delivery:

1. The research departments are leading the user engagement and algorithm optimisation work packages
2. They are testbeds for the trials, making use of access to staff and students to recruit participants

COVID-19 response

The SWOT analysis of delivering MaaS trials at the universities in the context of the COVID-19 recovery phase is displayed below.

Figure 4-2 - SWOT analysis - MaaS trials

Strengths

- Universities still represent a microcosm of society even in new post COVID-19 context
- Comparison between Southampton and Portsmouth
- Many research tasks can be delivered remotely
- Aims to enable people travel safely and reliably which will assist in the early stages of people returning to work

Weaknesses

- Algorithm optimisation tasks rely on procurement of MaaS platform provider to commence
- Focus on modal shift away from private car may be against health advice
- Services will be operating at a reduced capacity and frequency

Opportunities

- Potentially more willingness to take part in a trial as return to work acts as a pivot point for behaviour change
- Incentives to work from home will allow more flexible travel patterns
- Opportunity to focus on supporting users shifting to active travel modes
- User preference for removal of season tickets in favour of PAYG aligns with MaaS offering

Threats

- Any insights into barriers for modal shift may be heavily influenced by COVID-19 related anxieties
- Baselining travel data will be difficult if people are not travelling in consistent patterns
- Social distancing on public transport and fears of overcrowding will make incentivisation of shared modes and public transport difficult
- University terms very uncertain

Stakeholder engagement

We engaged with representatives of the University of Southampton and the University of Portsmouth to capture their readiness to take on the tasks set out in the bid proposed, to understand the risks and opportunities and to determine whether the campuses will remain good testbeds for MaaS trials. Minutes from our conference calls are available in our Stakeholder engagement document and a summary can be found in 6.1.A.2.

Our recommendations

Reinvent

The MaaS trials were originally developed as a means to scale up the number of participants with access to the MaaS app. The benefits of MaaS are even more important in the context of recovery from COVID-19 and therefore the app should be available to the public as early as possible. The trials should be used as a controlled environment to test changes in optimisation algorithms and the effectiveness of incentives schemes and new features before rolling them out in the live public platform. Due to the delayed start of the university MaaS trials and the reduced timescales, some funding should be reallocated to the platform development and marketing the rollout of the app to the public.

Table 4-2 - Recommendations - MaaS trials

#	Recommendation	Justification	Outcome	Start Timescale	Impact/ Completion timescale
1	Delay the start of the trials by at least 2	Trials should be postponed until there is greater certainty about	Trials conducted when travel conditions are more	Long Term	Long Term

	years to September 2022	<p>travel advice and when universities have reopened to students and staff.</p> <p>Gives the universities time to address short term operational challenges before trialling new ideas.</p>	<p>stable will lead to more reliable insights, a key objective of the FTZ.</p>		
2	Use the trials to test new features and algorithms	<p>By having some baseline data through the public's use of the MaaS app, the trials can be used to test the effectiveness of incentive schemes and receive feedback on new features such as the car cost calculator and addition of new modes.</p> <p>UoP's research on algorithm optimisation can also be tested in the university trials.</p>	<p>Trial outcomes can be tested against baseline data and specific elements of the MaaS application can be trialled in isolation to understand the effectiveness.</p> <p>User engagement can be split between existing users of the app to gain lessons learnt and new users to the platform.</p>	Long Term	Long Term
3	Retain universities as testbeds	<p>While there is much uncertainty around return to work for staff and return to campus for students, this is representative of the uncertainties across many sectors and therefore the universities still provide a good testbed.</p>	<p>Less reworking of the MaaS trials is required and universities remain engaged in programme.</p>	Long Term	Long Term
4	Pursue some research activities prior to Phase 0 Capture user preferences to aid the launch of the MaaS app prior to the trials, but keep this limited in nature	<p>Ensure that new anxieties and barriers to travel are captured which can be incorporated into the public MaaS product launch but don't use this as a sole baseline since responses in the recovery phase may neglect other important factors.</p>	<p>Captures users' changing needs so that the MaaS app can cater for any potential future lockdowns but doesn't waste resource on baselining or capturing user preferences which will be shortly outdated.</p>	Short Term	Short Term
5	Facilitate early engagement between UoP and MaaS platform developers for algorithm optimisation	<p>Some algorithm optimisation could occur for the public launch of the app and it is essential that the systems and methods between UoP and the</p>	<p>Compatibility between UoP systems and MaaS platform developers ensured from the start. Any quick wins in terms of tailored</p>	Short term	Medium Term

	MaaS platform supplier are compatible.	optimisation for the Solent region are realised.		
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4.2. Growing Solent Go

An Overview

Solent Go is an established multi-operator tickets currently in use across the Solent region, offering bus and ferry travel. It is currently available as paper, ITSO smartcard and mobile (QR code) through the bus operators own apps. The Growing Solent Go project aims to bring both individual benefits to ticketing across Solent while the back office would underpin the MaaS scheme, through ticketing via the MaaS Marketplace.

The planned enhancements as part of FTZ see the introduction of additional ticket types. These tickets include Carnet and Jobseekers tickets. The Solent Go zones will also be reviewed and see the creation of new city region zones. The integration of bus and rail travel will also be included.

COVID-19 response

The SWOT analysis of delivering the Solent Go enhancements in the context of the COVID-19 recovery phase is displayed below.

Figure 4-3 - SWOT analysis - Growing Solent Go

<p>Strengths</p> <ul style="list-style-type: none"> Digitally focussed enhancements remove the need for cash or user/ driver engagement Enhancements offer tickets with greater flexibility Likely increase in people seeking employment so Jobseekers tickets offer support towards mobility The marketplace app can be integrated with the MaaS Platform. Ability to pass additional information to the user through Solent Go app Additional functionality within Solent Go including new modes and mobility credits. 	<p>Weaknesses</p> <ul style="list-style-type: none"> Requires engagement from the operators to implement changes.
<p>Opportunities</p> <ul style="list-style-type: none"> Ability to introduce more flexible tickets in line with changing behaviours Encourage travel at less crowded times or not all the time through ticket choices and available information Potential to include additional ticket options such as key worker cards 	<p>Threats</p> <ul style="list-style-type: none"> Current operators have more fundamental concerns around ridership, capacity and delivering safe services. These enhancements may not be a priority. People may not return to public transport

Stakeholder engagement

We engaged with the two key operator groups, SHBOA and SWR to inform our recommendations from a supplier viewpoint. Justification for engaging with each of the specific supplier and minutes from our conference calls are available in our Stakeholder engagement document and a summary can be found in 6.1.A.3.

Our recommendations

Reconfigure

Capitalising on the current focus of reducing the return to the private vehicle a ticketing system that offers the capability to utilise different forms of payment on the bus and at some stage incorporate other modes is essential and should be prioritised. Growing Solent Go offers the FTZ the most effective way to provide the MaaS scheme with a ticketing system and this remains so. With challenges around suitability of some of the enhancements and the fact this is operator run, alternatives or priorities should at least initially be explored with a quick rollout of some of the functionality below to maximise the current opportunity. It should be noted that Public Transport will not be a preferred mode of choice in the recovery phase.

However, as easily implementable in the short term it is envisaged that the carnet ticket offers a 'quick-win' to cater to the changing needs of the public which could be implemented via existing systems/ ticketing media, and therefore should be considered for short term prioritisation.

Table 4-3 - Recommendations - Growing Solent Go

#	Recommendation	Justification	Outcome	Start Timescale	Impact/ Completion timescale
1	Strongly encourage operators to offer Carnet Ticket on existing formats	Evidence from stakeholders and the Thought Piece suggests the season ticket is unlikely to return and the flexibility a carnet offers is going to be essential. Relatively simple to implement in existing format (through Smartcard and although technically simple will require ITSO engagement) and not dependent on MaaS app.	Offers people a cost-effective flexible ticket. Ability to understand if this encourages people to travel.	Short term	Short Term
2	Incorporation of other modes and functionality as part of Solent Go (see recommendation 2 of Mobility Credits Trial)	Bus and train travel can only be part of the solution with social distancing rules. Need to consider if the Solent Go back office provide the ticketing mechanism for new active travel micro-mobility modes that may become more vital.	Increased up take of Solent Go app and increased functionality.	Medium Term	Long term
3	Dedicated delivery team/ manager to work closely with both SHBOA, SWR and other related stakeholder	Concerns from operators about ongoing situation and implications towards the Solent Go enhancements and priority. Requires ongoing discussions as situation develops and important to select a point of contact	A vital point of contact for the operators and regular engagement with them is likely to keep them engaged throughout the programme.	Short term	Short term

		servicing the FTZ programme as COVID-19 impacts continue.			
4	Additional information delivered as part of Solent Go app	Consider working with SHBOA and existing Solent Go app to communicate new bus times and crowding information for the journey and the destination encouraging travel at different times.	Access to information and advice will be critical as individuals begin to re-plan journeys.	Short term	Medium term
5	Involve operators in MaaS app requirements and design	There is current interest and desire from the operators to be more involved in the requirement specification. Method to mitigate the risk of disengagement.	Continued and maintained interest from operators and more likely Apps will match expectations and functionality requirements.	Short term	Long Term

4.3. Mobility Credits Trial

An overview

The Mobility Credits Trial has been designed to understand and establish how the provision of mobility credits will bring wider benefits and impacts to its users. It has been envisioned that mobility credits will automatically be credited to user accounts through the MaaS app and this would enable the measurement and collection of data to understand the impact on user travel behaviours. The participants for this trial would be selected based on criteria such as low-income households, young in age and location of residence.

The trials were due to take place in in the borough of Havant with resident of Leigh Park or Wecock Farm with comparisons drawn between the two testbeds.

The aim of the trial will extend to collecting insights into some wider impacts of mobility credits on individuals – for example how the economic/employment outcomes, participation in education, various social outcomes etc. for individuals may change as a result of provision of credits. Given the small scale of the trials (less than 100 participants), the objective is to draw insights into the potential impact that the rollout of a mobility credits scheme could have on the wider area, rather than making a large scale impact through the trial itself.

COVID-19 response

The SWOT analysis of delivering the Mobility Credits trial in the context of the COVID-19 recovery phase is displayed below.

Figure 4-4 - SWOT analysis - Mobility credits

Strengths

- Likely a significant increase in low income households
- Project offers ability to move to those who may have lost that ability
- Unlike other trials, control group in place so baseline data not required

Weaknesses

- Current plans require functional MaaS app
- Concerns over how quickly it can be initiated in current setting
- Expected increase in demand for credits and wider community issues if this cannot be fairly distributed
- Requires individuals to use of Public Transport

Opportunities

- Ability to alter trial and undertake through Solent Go Smartcard to allow quick rollout
- Understand link to productivity at a time when productivity is likely to be falling
- Undertake trial in different area and include other micro-mobility modes

Threats

- Requires operational Public Transport
- Ability to apply this to normal life would be questionable

Our recommendations

Reset

The Mobility Credits Trial could offer benefits to participants during a recession, however the scale of the funded trial is very small and there are dependencies on both Public Transport and availability of a MaaS app (to incentivise/understand behaviours) which means the mobility credits programme should not be rushed out as a response to COVID-19.

Even if it is technically feasible to undertake through existing Solent Go ticketing methods, the proposed approach to collecting data and measurement of impacts (the real value of the proposed trial) would be lost. By resetting we enable an understanding to be built around changes that need to be made to this project in terms of geographies, participants groups and mode choice.

Table 4-4 - Recommendations - Mobility credits

#	Recommendation	Justification	Outcome	Start Timescale	Impact/ Completion timescale
1	Review the trial details e.g. area, types of transport and in light of programme developments etc.	Area of trial may be inhibitive to moving programme forwards, depending on how things progress over the next year so if decision is made to move programme forward trial details should be reviewed to ensure objectives can still be met.	Trial still able to meet original objectives.	Long Term	Long Term
2	Review the management of participant and control group selection.	Recession and job loss during the recovery phase will cause those at the lower end of the socio-economic scale to have even greater challenges. Need to manage expectations	Both trial participants and control group are active and engaged in the trial.	Long Term	Long Term

		of control group as they are likely to feel disadvantaged and explore reimbursing them at a later date.			
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4.4. Dynamic Demand Responsive Transit (DDRT)

An overview

Many DDRT schemes which have launched in the UK and worldwide have since failed due to being unprofitable, therefore Solent Transport’s Dynamic Demand Responsive Transit Trials were developed with the aim of achieving commercial viability at the forefront. Nine potential DDRT zones across the Solent Region were identified for the FTZ funding application and from that, one zone will be selected for the trials. Given Southampton City Council and Hampshire County Council’s match funding, this zone is likely to be located in the Southampton City Region. This project seeks to integrate DDRT booking capabilities into the Solent MaaS “marketplace” to incorporate more services into a single platform and to connect wider catchment areas to the main public transport corridors as set out in the Transforming Cities Fund proposals.

COVID-19 response

The SWOT analysis of delivering the DDRT trials in the context of the COVID-19 recovery phase is displayed below.

Figure 4-5 - SWOT analysis - DDRT trials

Strengths

- Targets a new user type, focusing mainly on car-dependent consumers
- Agile business model allows assets to be repurposed where necessary
- Can test new routes and change quickly
- Capability to monitor and control capacity with no changes to booking system

Weaknesses

- Requires significant investment in marketing campaign
- Long lead time for zone selection, procurement and implementation

Opportunities

- Key workers can be isolated from the public transport network using dedicated DDRT vehicles to go to workplaces and hospitals etc
- Smaller vehicles reduce potential number of interactions
- Small trial can be launched prior to procurement to test viability in next context
- DDRT platform can be tailored for fixed-line bus services

Threats

- Public will be adverse to sharing post COVID-19
- Social distancing difficult in smaller vehicles
- Investment funds from operators will be limited

Stakeholder engagement

We engaged with Shottl to understand the opportunities and risks of a DDRT trial in the Future Transport Zone. Minutes from our conference calls are available in our Stakeholder engagement document and a summary can be found in 6.1.A.4.

Our recommendations

Reinvent

The original proposal required investment and operation at commercial risk from bus operators which is unlikely to occur during the recovery phase as they focus on more urgent matters and have little scope to take commercial risks.

However, there are opportunities to trial DDRT to assist COVID-19 recovery or support, through creation of a new collaborative commercial model with a local bus operator and SME DDRT provider, DDRT might offer potential to provide a substitute for traditional bus services in areas which had lower provision in pre-COVID-19 times, and hence are likely to struggle to support any bus services in the short, medium and possibly longer term.

This requires an overhaul to the original approach but offers an operator sensitive approach to DDRT which can support both them and users through the challenging period. This approach also offers the potential to understand if a joint venture approach can supplement provision moving forward.

Because of the high uncertainty around viability of DDRT in the post COVID-19 world (it is potentially highly vulnerable to user avoidance of public transport modes), if additional funding was required to enhance projects more likely to be successful in the new normal (e.g. enhanced Micro mobility, bike/ e-bike share & e-scooter trials), the DDRT trials project budget could be a candidate for redirection, either partially or in its entirety.

Table 4-5 - Recommendations - DDRT

#	Recommendation	Justification	Outcome	Start Timescale	Impact/ Completion timescale
1	Engage with bus operators and SME DDRT providers to understand appetite of joint venture model	A joint venture provides the ability to set up a more immediate DDRT trial as a form of COVID-19 response. This form of proposal has yet to be tested with both parties	Understanding and confirmation as to whether this is a viable solution. If not considered viable then the DDRT project should be delayed (potentially for 1+ years) until the bus operators are ready for delivery or funds diverted to other projects.	Short Term	Short Term
2	Consider descoping the project and find areas for reallocation of funds	The viability of DDRT post-COVID-19 is very uncertain and may be highly susceptible to reduced propensity to shared travel modes.	Other projects which are more likely to succeed in a post-COVID world and meet user requirements could be enhanced and their impacts and benefits having a greater reach.	Short Term	Short Term

4.5. Bike/e-bike share scheme

An overview

At present there is no significant shared cycle scheme within Solent region, yet it is considered to have a high chance of success when it comes to bikeshare scheme delivery. Therefore, the FTZ bike share project plans to introduce a large-scale bike share scheme to provide a cost effective and sustainable transport option in the region.

COVID-19 response

The SWOT analysis of delivering the bike/ e-bike share scheme in the context of the COVID-19 recovery phase is displayed below.

Figure 4-6 - SWOT analysis - Bike/e-bike share scheme

Strengths

- Provides a positive alternative to those who don't want to use public transport
- Suitable for commuting and leisure activities
- Continues to support the current trend of increased cycling
- Considers security which will be essential in ensuring bike supply continues

Weaknesses

- Shared mobility sees potential for multiple people to use the same bike in one day, raises hygiene concerns
- Only suitable for journeys of certain distance

Opportunities

- Offers new cyclists access to a bike which could support their new commuting pattern without the need for storage or investment
- Supports more flexible working habits/ working from some of the days
- Potential to understand different hiring or reservation models
- Could support 'pop up' park and rides or temporary park and rides

Threats

- New flows or commuting patterns may result in different key locations. Current proposed 'Closed User Group' locations may no longer be viable
- Increased number of people cycling, current plans may not be able to meet the demand

Stakeholder engagement

Brompton bike hire were engaged with and the overview of their discussion can be found in 6.1.A.5.

Our recommendations

Reconfigure

The bike share scheme has the ability to maximise initial behavioural changes influenced by COVID-19. Through making some changes to the existing proposal the benefits brought by the scheme could see both support towards shorter term COVID-19 recovery and return to work, while maintaining original FTZ ambitions and objectives.

With this in mind the bike share scheme should be prioritised and progressed, and consideration should be given to diversion of budget from more vulnerable/ risky projects to enhance this scheme (e.g. for provision of additional e-bikes) if further funding cannot be secured from other sources.

Attention to the proposed locations should be considered, as there are expected to be changes to commuting patterns. Locations should be reviewed and potentially altered to ensure they are still suitable. The original objective to test approaches which reduced scheme losses to vandalism are still relevant and will support efforts to achieve long term viability.

Table 4-6 - Recommendations - Bike/e-bike share

#	Recommendation	Justification	Outcome	Start Timescale	Impact/ Completion timescale
1	Explore further funding that can support bike share coverage or the do maximum approach	Government have announced large sums of cycling and walking funding. Also there is potential to divert funding to this scheme from other FTZ projects assessed as having lower potential now.	Accessing additional funding could see the 'do maximum' approach delivered. Seeing more bikes, and inclusion of E-bikes which would make longer journeys feasible through bike share.	Short term	Medium Term
2	Prioritise delivery of the bike share scheme	Current demand and the trend for cycling has increased in response to COVID-19 and government have suggested it as a preferred commuting mode.	Prioritising the scheme meets both short term COVID-19 response needs and medium term FTZ ambitions.	Short term	Short Term
3	Review proposed locations, with considerations of workplaces over bus interchanges	Expectation that bus ridership will decrease. Many will choose to avoid bus travel entirely so in the short-term locating bikes at bus interchanges may not be as beneficial as other locations.	Initially meets current needs by choosing locations which will see greatest short-term success and commercial viability. Longer term roll-out can look to include transport interchanges as public transport begins to see greater uptake. Ability to move	Short Term	Short Term

			locations with our approach is a significant advantage as demand changes.		
4	Include hygiene or cleanliness considerations in procurement requirements	Greater consideration around transmission points and hygiene in COVID-19 recovery stage will see greater consideration by users for a clean shared mode.	Solent transport develop a safe shared mobility solution which meets both safety and transport needs.	Short Term	Short term
5	Explore longer term hire/sharing alternatives	Seen significant uptake since start of COVID-19.	Prioritising the scheme meets both short term COVID-19 response needs and medium term FTZ ambitions.	Short Term	Medium Term

4.6. Lift share workplace grant scheme

An overview

Lift share programmes have been common within the Solent area for a decade, and in some opinions under utilised, this project explores the potential of implementing a digital solution through the MaaS platform. The focus of this project is to encourage uptake of the digital platform by major employers within the region, in particular focussing on 24-hour operations where Public Transport is not possible for employees and single ridership is high.

COVID-19 response

The SWOT analysis of delivering the lift share project in the context of the COVID-19 recovery phase is displayed below.

Figure 4-7 - SWOT analysis - Lift share

Strengths

- Targets those who use private vehicles but does not expect them to change mode
- Immediate cost saving for drivers which could be critical during recession

Weaknesses

- Requires sharing in confined space with someone outside your household

Opportunities

- In medium/longer term could help address any increase in private vehicle ridership
- Review of workplace travel patterns likely to occur
- Workplaces that require people to be in situ will need alternatives to public transport

Threats

- Propensity to share may be low for a significant amount of time even in subsequent phases
- Workplace match funding unlikely

Our recommendations

Reinvent

Lift share could still be a useful part of the Future Transport Zone and the COVID-19 recovery.

However, in terms of prioritising key recovery elements this should be pushed further back and resource prioritised towards some of the schemes felt to have higher potential now, particularly in light of the perception of risk posed by lift sharing. Meaning launch of workplace schemes should be considered in the medium term.

If these schemes are not successful or there is little uptake, funds should be re-allocated to other higher priority or successful projects.

Table 4-7 - Recommendations - Life share

#	Recommendation	Justification	Outcome	Start Timescale	Impact/ Completion timescale
1	Identify and engage with employers initially identified, particularly those with limited parking capacity and/or with large % of employees regularly commuting by Public Transport	As highlighted within our evidence, China saw 2% increase in lift share where other modes saw up to 80% reduction. Rather than individuals taking Public Transport, car share can be seen as a viable alternative, particularly in occupations for high-risk workers (hospitals). These workers are in close proximity with each other daily so car sharing is not likely to phase them as much.	Targeted lift share campaign to those individuals for which active travel or safe use of public transport is not an option.	Medium Term	Medium Term
2	If uptake is low after Recommendation 1 review programme and assess if funding could be better allocated to other opportunities or should be saved and lift share incorporated into MaaS once safe and within the “recovery phase”	Evidence suggests social-distancing measures will be enforced until the “new normal” and even then, propensity to share enclosed spaces may be low.	Opportunity to reset and push backwards in the programme or reallocate funding to other higher potential opportunities.	Medium Term	Medium Term

4.7. E-scooter scheme

An overview

Incorporated at the request of DfT after a decision was made during the bidding phase to not significantly consider e-scooters, although flexibility was built into our programme to allow the introduction of new/alternative modes. Initial findings suggest that the trial for Solent Transport will be incorporated as part of the existing “Park and Ride” solution to replace the bus journey. There is a preference towards a docked scheme rather than dockless in these areas.

COVID-19 response

The SWOT analysis of delivering the E-Scooter project in the context of the COVID-19 recovery phase is displayed below.

Figure 4-8 - SWOT analysis - E-Scooters

Strengths

- Additional alternative mode to car travel
- Considered more sustainable than private car use
- Provides an alternative to those who no longer want to use public transport, but the journey is not possible by other active modes

Weaknesses

- Shared mobility sees potential for multiple people to use the same bike in one day, raises hygiene concerns
- Competes with road/ path space with other active transport modes which have also seen an increase due to COVID-19

Opportunities

- Could plug gaps or offer additional capacity provision in areas that currently rely on bus provision
- Potential to trial different hire/ usage models which may support COVID-19 hygiene concerns such as reserving or hiring the same scooter
- Understanding how COVID-19 transport changes (growth of cycling/ wider pavements) work alongside the addition of a new mode.
- Ability for operators to use their own app in the short-term to meet the immediate need before transition towards the full MaaS app.

Threats

- Could be too expensive an option for those who are impacted by COVID-19 recession or job losses
- E-Scooter providers don't survive COVID-19 crisis
- Government legislation may restrict freedom of operation.

Design

As this project has not been specifically scoped out yet our recommendation is to develop this project as a matter of urgency as it is felt to have high potential to assist the transport response to Covid-19 and may have higher user appeal than shared public transport modes.

Like recommendations around the other sharing schemes it will be important to identify the right location in the new context and provide assurance around the safety of these shared modes. In the short term this offers a ‘hook’ for individuals to trial new mobility modes which would make it easier to transfer them onto a full MaaS app in time.

As there is no specific budget line for e-scooter trials in the FTZ funding award from DfT, if a trial is to be progressed using FTZ funding, budget would need to be diverted from other projects to support a trial. Other FTZ projects with higher risk/ lower potential in the post-Covid19 world have been identified elsewhere in this report.

Our recommendations

Table 4-8 - Recommendations - E-Scooters

#	Recommendation	Justification	Outcome	Start Timescale	Impact/ Completion timescale
1	Develop project as a matter of urgency	Offers alternative to car travel and initial evidence is that E-Scooters could see a large uptake at times such as these. Therefore, E-scooters are seen as core to supporting both the COVID-19 response and the FTZ development. Government has relaxed rules around e-scooters to develop this.	E-scooter trial able to commence quickly. Meeting both short term COVID-19 recovery and future mobility objectives.	Short Term	Short Term
2	Explore potential additional funding to support this from COVID-19 response	The FTZ funding from DfT does not include a specific allocation to an e-scooter project as the Solent bid did not originally propose such a trial. Re purposing from other areas may be possible. Government have announced a range of additional funding streams for COVID-19 related transport recovery.	Additional funding to run an effective trial which could occur across a range of locations or use cases.	Short Term	Short Term
3	Consider multiple commercial and usage models during planning stage	With concerns of hygiene, sharing and vandalism still likely to be present, consideration of both reservation or pay as you use models might be suitable in current climates.	Understanding as to how people perceive and interact with both commercial and usage models.	Short Term	Medium Term
4	Consider locations in light of new road structures/ set up	Expectation that there will be changes to road and pavement structures, such as widening for social distancing while walking, cycle paths to encourage return to commuting through cycling. E-Scooters need to compliment	Growth of understanding as to how COVID-19 pavement and road changes impact E-Scooters and surrounding policy recommendations.	Short Term	Short Term

	and fit in with these changes.			
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4.8. Macro-consolidation

An overview

The aim of this project is to increase the use of the existing Southampton freight consolidation centre. Through engagement, incentives and research it is hoped that the number of businesses using the consolidation centre can be increased and connections with the micro-consolidation projects and ambitions can be realised.

COVID-19 response

The SWOT analysis of delivering the macro-consolidation scheme in the context of the COVID-19 recovery phase is displayed below.

Figure 4-9 - SWOT analysis - Macro-Consolidation

Strengths

- Road traffic is expected to rise, macro- consolidation offers the to reduce the contribution from freight deliveries.
- Connected to the micro-consolidation points, creating a joint approach.
- Organisations may be looking for ways to reduce costs or make their supply chain more efficient as they are facing greater pressures.

Weaknesses

- Project relies on a large proportion of research to baseline. Baselining at this current time may be challenging

Opportunities

- Acts as a potential mitigation for the increasing traffic levels post COVID-19 lockdown relaxation

Threats

- Changing delivery patterns makes it difficult to baseline delivery trends and flows.
- Some organisations may have less desire and/ or resource to be involved in the project as they are faced with greater current challenges.

Stakeholder engagement

The freight and logistics team from the University of Southampton were engaged with as part of the evidence gathering.

Our recommendations

Reset

Macro consolidation offers the potential to reduce the number of freight vehicles on our roads through improved efficiencies. In the COVID-19 environment this will remain of high importance. If the necessary resource is available, the programme should continue as planned with activities schedule to commence in the early stages of the programme.

However, as the micro-consolidation and other personal mobility projects (bike share and e-scooters) could deliver quicker COVID-19 recovery potential, macro-consolidation could be paused. This could see Southampton focussed implementation of DSPs and user incentives pushed back until Year 2, and delivered in a shorter time span. This is also supported by the lower level of funding received seeing lower ambitions in terms of DSPs and organisation involved.

#	Recommendation	Justification	Outcome	Start Timescale	Impact/ Completion timescale
1	Pause Macro-consolidation project kick off until year 2	Other projects which could deliver quicker COVID-19 benefits require more immediate resourcing.	Macro-consolidation still delivers COVID-19 and wider FTZ benefits by the end of the programme.	Medium Term	Long term
2	Prioritise 'milk round' connections with the Micro-consolidation points	Supports the impact of the micro-consolidation project. Smaller and more frequent individual purchases will likely see a greater increase and supporting this element of the project could have greater impact in reducing road traffic.	Supports the micro-consolidation success as well as meeting macro project aims.	Medium Term	Long Term

4.9. Micro-consolidation

An overview

This project would trial the creation and use of 'Micro-consolidation Points' (MCPs), to assist last-mile freight activities across both Southampton and Portsmouth. The elements of this project include dynamically managing the use of existing parking spaces/ bays to allow timed drop-offs and pick-ups by parcel carriers, through a newly developed bay booking tool. As well as the installation of locker systems and using established attended delivery services to support last mile delivery logistics and create opportunities for last-mile e-cargo bike deliveries.

COVID-19 response

The SWOT analysis of delivering the micro-consolidation scheme in the context of the COVID-19 recovery phase is displayed below.

Figure 4-10 - SWOT analysis - Micro-Consolidation

Strengths

- The lockdown measures have seen a rise in home deliveries and related freight.
- Offers a solution to minimise impacts of increased home deliveries
- Lockers will provide alternative for those who begin to return to work over the course of the recovery
- E-cargo bikes could help alleviate extra vans on the road when car usage rises in the recovery phase.

Weaknesses

- Increased level during lockdown may not remain at the same elevated level
- Evaluation period determining BAU parcel flows may be skewed by current patterns

Opportunities

- Simulation of changes could be used to simulate both a continuation of elevated COVID-19 delivery trends but also a return to slightly lower levels
- To bring in large home delivery providers (Amazon, DHL etc) to see a substantial impact

Threats

- Delivery trends of the lockdown and lockdown relaxation may dramatically change as we enter a recession and people reduce spending habits.

Stakeholder engagement

The freight and logistics team from the University of Southampton were engaged with as part of the evidence gathering.

Our recommendations

Reconfigure

In order to mitigate the impacts from increases in online deliveries occurring as a response to COVID-19, the micro-consolidation project should be progressed. This would see some of the research consolidated or conducted alongside the last mile delivery trial. Procurement should continue as planned at the beginning of the programme, and considerations of key locations and routes should be reviewed in the COVID-19 setting.

Running the programme as planned will still see the benefits of micro-consolidation realised as it is expected that the trend of increased home deliveries will remain. To maximise the benefit this brings in the current context, partnering with a more significant provider of home deliveries should be explored as this would bring far greater scale of benefits as well as upscaling the research and understanding outputs. Currently the resource and budget may struggle to support this so this project could be a candidate for additional resource from de-prioritised projects.

#	Recommendation	Justification	Outcome	Start Timescale	Impact/ Completion timescale
1	Bring forward the low/zero emission last mile delivery trials and explore the opportunity to bring in a more significant provider	Home deliveries have increased during lockdown measures and are expected to remain at a higher level in future. Therefore the objectives of this project increase in importance. This context offers a unique opportunity to trial and identify	Better understanding of implementation of sustainable last mile deliveries at a time when this is significantly increasing, and an opportunity to reduce their impact. These findings	Short term	Medium term

		different responses to the last mile challenge.	would be replicable across the UK.		
2	Awareness of the BAU outcomes may be COVID-19 skewed	At present it is unclear as to if this trend of increased deliveries will remain or change.	Valuable research will still be gathered which will support medium to longer term micro-consolidation.	Short Term	Medium Term

5. Programme

An updated programme plan is provided in an excel document, referenced FTZ Programme Milestone Alterations_v1. It provides an overview of which projects should be progressed in the short, medium and long term in relative to the funding window.

6. Summary Table

A summary of the recommended approaches to each project in Theme 1: Personal Mobility is provided in the table below.

Table 6-1 - Proposed approach for each project

Project Number	Project Name	Option 1: Reset	Option 2: Reconfigure	Option 3: Reinvent
Theme 1: Project 1	MaaS platform		•	
	MaaS trials			•
Theme 1: Project 2	Growing Solent Go		•	
Theme 1: Project 3	Mobility credits	•		
Theme 1: Project 4	DDRT			•
Theme 1: Project 5	Bike/e-bike share scheme		•	
Theme 1: Project 6	Liftshare			•
Theme 1: Project 7	E-scooters*			
Theme 2: Project 1	Drones		•	
Theme 2: Project 2	Macro-consolidation	•		
Theme 2: Project 3	Micro-consolidation		•	

*Project not defined during bid phase so required to design new approach

6.1. Summary of recommendations

We have summarised the recommendations which we believe Solent Transport should focus on because they support a COVID-19 recovery while maintaining the core focus of the Future Transport Zone. These have been prioritised through identifying the most effective in the current situation and understanding that there is finite resource to deliver these, especially in year 1 as recruitment is ongoing.

Table 6-2 - Prioritised recommendations (high to low)

Project/Programme and Recommendation number	Recommendation overview	Justification for prioritisation
Overall Programme Mobilisation	Programme Governance	It is imperative that the Future Transport Zone programme is mobilised to support the COVID-19 recovery. Ensuring governance is established early will facilitate robust communications and reporting lines, confirm roles and responsibilities to enable implementation and provide the essential framework for partner and procurement activities. Resourcing the delivery of the FTZ has become of increased importance with a need to move quickly and effectively given the current context.
Overall Programme Mobilisation	Procurement	Procurement has the longest lead time. This should be prioritised if the FTZ funding and COVID-19 recovery phases are to work together. Time should be taken to explore all the procurement options, considering alternative routes only where appropriate.
Bike/e-Bike Share – Recommendation 2	Prioritise delivery of the bike share scheme and allocate resource accordingly.	The best-case scenario for a COVID-19 response is to replace private vehicle journeys with big shift to active travel modes. Facilitating bike sharing should therefore be of the utmost priority, even if in the short term it is not supported by MaaS apps. The long term viability of any bike share scheme must still be a significant consideration as part of this recommendation.
E-scooter Trial – Recommendation 1	Develop E-scooter project as a matter of urgency.	Similar to the bike share the priority of introducing E-scooters should be high as it offers an alternative to individuals returning to the private vehicle.
MaaS Platform – Recommendation 1	Prioritise the soft market testing of the MaaS platform and identify any approaches to speed this up.	The MaaS app and the flexibility it offers could support the COVID-19 response with the ability to get information and advice to individuals quickly, alongside the facilitation of contactless ticketing and booking. This must be considered in light of the recommendation to deliver the MaaS app to the general public before the University trials.
DDRT – Recommendation 2	Consider descoping the project and find areas for reallocation of funds.	Reallocating in favour of schemes with better Benefit-Cost Ratios will give a higher level of probability of assisting in the COVID-19 response.
Solent Go – Recommendation 3	Prioritise carnet ticket.	A more flexible approach to travel is imperative moving forwards. Even for individuals that prefer the office it is likely during the next phase travel will be significantly reduced. A carnet ticket will support this and should be prioritised.
Micro consolidation – Recommendation 3	Consider bringing forward last mile trial.	Opportunity to begin mitigating against increased delivery impacts of COVID-19, if resource allows.

This report, in the context summarised in the complementary Thought Piece, has established a way forward to mobilise the Solent FTZ and enable the implementation of the key objectives. It shows how the FTZ programme can be adapted to meet changing objectives and priorities, namely:

The delivery of a Solent Future Transport Zone across the next four years, that supports the COVID 19 recovery, develops future transport technology solutions and adapts to changes in transport delivery and travel behaviour.

The COVID-19 response at an authority level provides an ‘opportunity’ to support active and sustainable travel to prevent a return to the private vehicle. The response to the pandemic offers the chance to start embedding the changes we are seeing in travel choice and behaviour. In the immediate term, public transport will suffer and there will no doubt be a reversion to car usage. However, it is critical that this is challenged and the FTZ is instrumental to this. FTZ delivery can initiate and demonstrate new approaches at a time when accepted norms are being challenged or cast aside. Implementing the FTZ proposals will help build resilience into the network and lay the foundations for alternatives to be taken up as we emerge from the immediate public health crisis with changed lifestyles and new ways of working.

Appendix A. Stakeholder Engagement

A.1. MaaS Platform

Table A-1 - Stakeholder engagement - MaaS platform

	Summary of market response
Readiness	<ul style="list-style-type: none"> Platform developers are accustomed to working remotely and have not had significant staff reduction due to illness, furlough or redundancy and are therefore ready to proceed with any development works. One supplier suggested the lead time from appointment of provider to 'go live' date takes approximately 6 months, could be more or less depending on the level of changes to an existing white label platform, quality of APIs from service providers and willingness to collaborate from other stakeholders. FTZ remains a priority and suppliers would be willing to respond to tenders from Solent Transport.
Risks	<ul style="list-style-type: none"> Car dependence and perception that car is the safest mode are risks to uptake. Platform development is dependent on cooperation between transport operators including public transport and micro mobility providers. Any 'weak' links cause delay to launch and so a good working relationship is key.
Opportunities	<ul style="list-style-type: none"> Providers are seeing an uptake in DRT services offered through the platform and reorganisation of assets for DRT buses to be used for transporting key workers to avoid them having to get on public transport and increasing the likelihood of infecting other passengers. Seeing a rise in bike hires, especially the Brompton Bike business model which rents bikes to one user for days at a time rather than hours and is stored in their homes or workplaces overnight. Users require now, more than ever access to real-time data on bus frequency and scheduling. Looking into ways of predicting and informing on capacity on PT modes and using mobility credits which can only be used at certain times to spread the peak of rush hours.
Procurement	<ul style="list-style-type: none"> Consortium or individual procurement approach is fine, but a consortium enables suppliers to ensure there are no 'weak' links and sets a good working practice between the partners from the start. Some authorities have bypassed formal procurement routes to fastrack MaaS implementation.

A.2. MaaS trials

Table 6-3 - Stakeholder engagement - MaaS trials

Consideration	University of Portsmouth	University of Southampton
Research	<ul style="list-style-type: none"> Delivering FTZ projects, including research elements requires the recruitment of new staff which is blocked at the moment by HR. The software development is dependent on procurement of MaaS platform. 	<ul style="list-style-type: none"> UoS research capabilities remain strong but there will be some lead time required to get to full capacity. User research and engagement can begin but being mindful that responses may be overshadowed by short term context and

		therefore long-term barriers may be neglected.
Trials	<ul style="list-style-type: none"> It is unclear when students will be returning to campus. UoP is undergoing major changes as a result of COVID-19 and therefore is prioritising the delivery of day to day teaching. 	<ul style="list-style-type: none"> Uncertainty around when campus will fully reopen. University is likely to prioritise other operational needs in short term. Opportunity to use the 10-year travel plan to leverage MaaS trials and get senior buy-in.

A.3. Growing Solent Go

Table 6-4 - Stakeholder engagement – Growing Solent Go

	SHBOA	SWR
Readiness	Still committed to the Solent Go enhancements and reviewing the scope, feasibility and platform requirements. They are ready to commence detailed discussions around the Solent Go and MaaS app aspects and planning since neither rely on pre-established levels of demand which might have been affected by COVID-19.	Still committed to the heads of terms agreement. They are looking at introducing the Solent Go option to their smart card and ready to start discussing technical specifications.
Risks	Short term focus will be understanding the COVID-19 influence on demand and capacity. Understanding of the situation is changing regularly, potential disengagement around Solent Go could arise. Some enhancements may need to be revisited in the light of the new base travel positions post COVID-19.	Currently under DfT's emergency measures, so unclear how long that will remain.
Opportunities	Greater involvement in the MaaS Marketplace App development	Using COVID-19 changes to travel as an opportunity to re-launch their smartcard offering.

A.4. DDRT

Table 6-5 - Stakeholder engagement - DDRT providers

	Summary of market response
Readiness	<ul style="list-style-type: none"> Accustomed to working remotely and have the tools available to do so. Could implement a mini-pilot within 2-3 weeks to test uptake of DDRT in current circumstances
Responses from live DDRT trials	<ul style="list-style-type: none"> On services which remain operational, the ridership levels are at 25% of the pre COVID-19 patronage. This is much higher than other shared modes such as buses. Operational services are implementing measure to reduce capacity: <ul style="list-style-type: none"> This is typically by 1/3 Very easy to implement and enforce via the booking system No major impact on commercial viability, since average occupancy pre-COVID was around 1/3 of total capacity anyway Looking into putting Perspex screens in between riders to improve safety too.

	<ul style="list-style-type: none"> • They have offered to use case of DRT for transporting key workers, but this hasn't had much take up - unclear why this is but suspected to be to do with authorities not able to keep up with the speed of change.
Risks	<ul style="list-style-type: none"> • Likely to see a rise in car usage and bike usage where people own them. • Difficult to predict the longevity of nervousness towards shared modes and the relative perception of safety between buses, DRT minibuses, lift sharing etc. without launching a trial. • Risk to setting up a new scheme now, that there is likely a big change in demand and travel patterns and thus user profiles.
Opportunities	<ul style="list-style-type: none"> • DDRT offers a better digital control of load factors which is a key concern in the recovery phase. • Lots of vehicles and fleets being underutilised at the moment and could be repurposed as DDRT vehicles e.g. taxis, minibus services. • The reduction in demand for taxis is expected to last a significant length of time meaning there will likely be drivers and vehicles available at a reduced cost. • Shotl are seeing a new demand for DDRT platforms to be used for fixed-line bus services in order to have greater data collection and control of capacity. They have examples of this working with fixed line, full demand responsive and hybrid solutions depending on the use case. • DDRT is most valuable in the off-peak, as off-peak bus services become even less commercially viable if people are not making as many non-essential journeys, DDRT is a better alternative. • Looking into converting routes which were on the cusp of being better suited to demand responsive, post COVID-19 the patronage has reduced sufficiently for the business case to suit DRT better rather than reducing frequency to the point where the service is too inconvenient for users. • Blue collar workers are a good target market to ensure safe and reliable transport to and from work during lockdown relaxation and recovery phases.
Procurement	<ul style="list-style-type: none"> • Shotl are happy to launch a pre-pilot mini-trial for limited cost and rapid delivery speed (2-3 weeks implementation or 6 weeks if white label) which can test operational feasibility and user appetite before formal procurement process. • Procurement for similar projects has been very time consuming and a big stretch on resource for small companies (especially if multiple tenders come out at once). • Need to work with on the ground vehicle and driver operators

A.5. Bike hire engagement

Table 6-6 - Stakeholder engagement - Bike/e-bike share

	Summary of market response
Readiness	<ul style="list-style-type: none"> • Significant uptake for bike hire companies, anecdotally one company normally has 3 enquiries a week for bike hire services at offices currently it is about 10 a day.
Risks	<ul style="list-style-type: none"> • Huge uptake in cycling expected putting unseen demand on (conservatively, an extra 10,000 journeys a month as per our thought piece: <ul style="list-style-type: none"> ○ Walking/cycling infrastructure ○ Cycling equipment including bikes
Opportunities	<ul style="list-style-type: none"> • Offices that need staff to work looking for alternative safer travel for employees