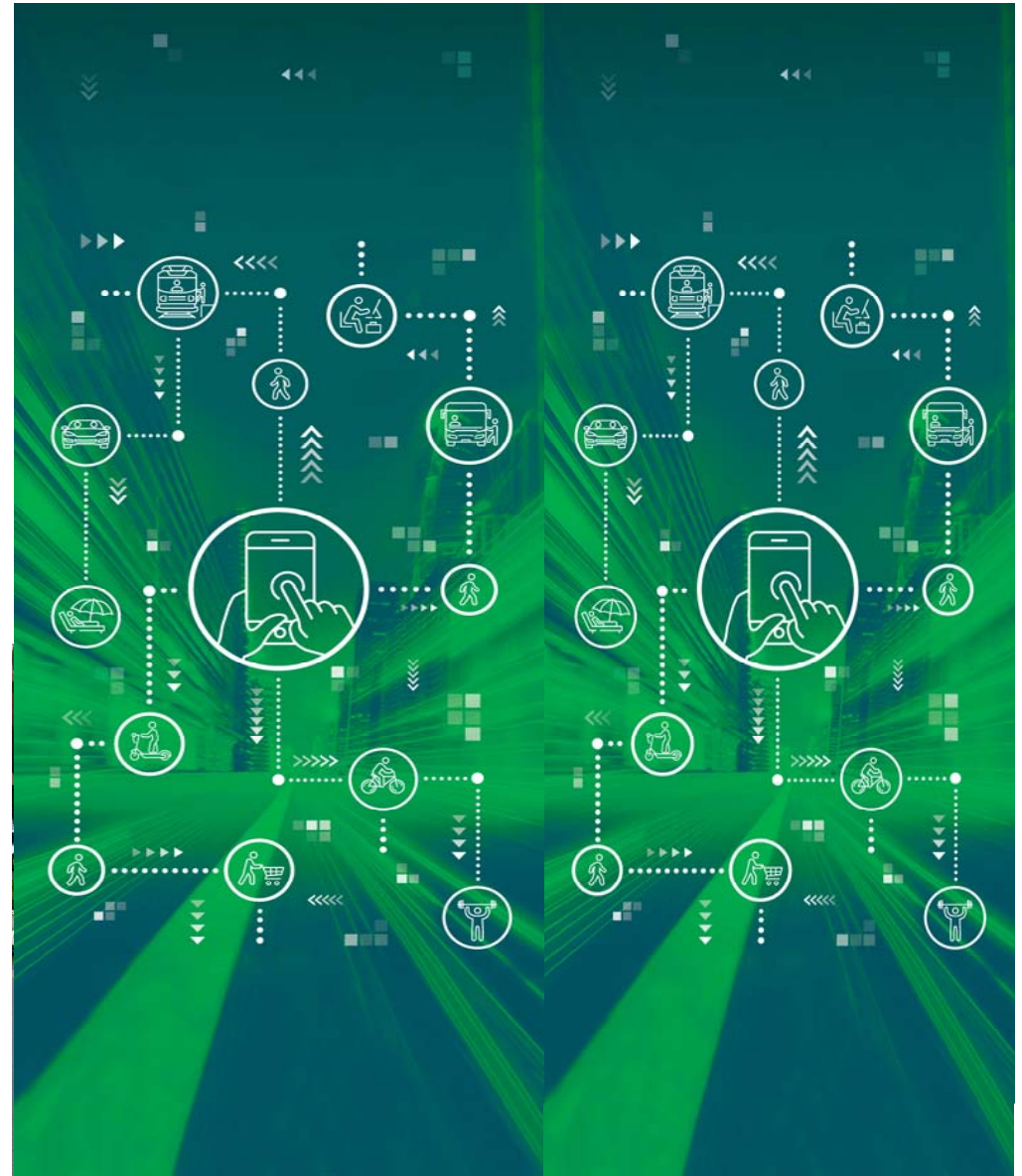


What might Covid-19 mean for Mobility as a Service (MaaS)?

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<http://sydney.edu.au/business/itls>

Roads Australia Webinar on
MaaS: opportunities and threats posed by COVID-19
Thursday 28 May 2020, 10-11 am



Headline Results of Covid-19 National Travel Survey (Wave 1 March/April 2020)

Beck, M. and Hensher, D.A. Insights into the Impact of Covid-19 on Household Travel, Work, Activities and Shopping in Australia – the early days under restrictions

<https://ses.library.usyd.edu.au/bitstream/handle/2123/22247/ITLS-WP-20-09.pdf?sequence=3&isAllowed=y>

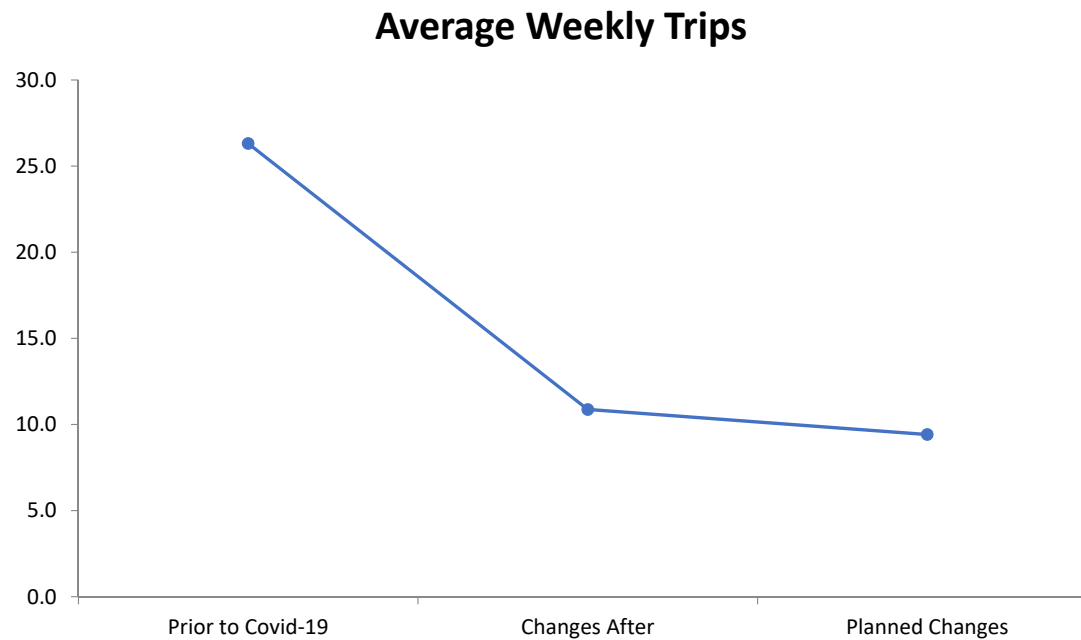
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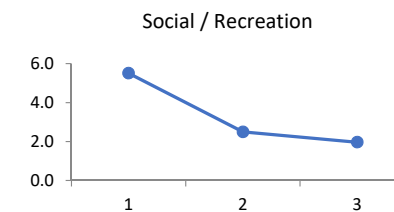
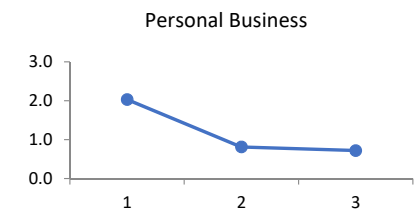
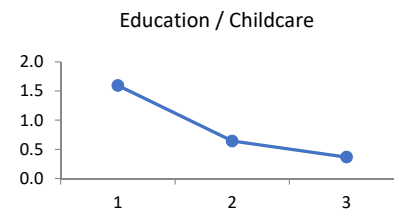
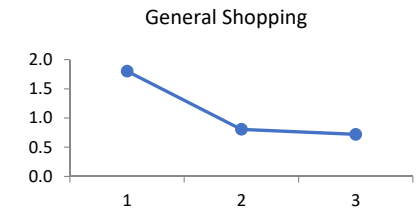
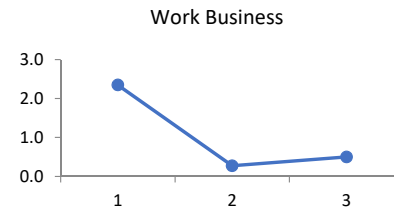
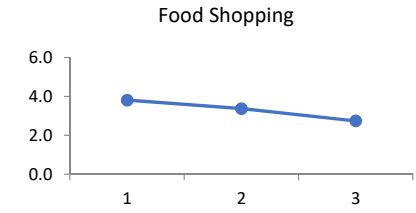
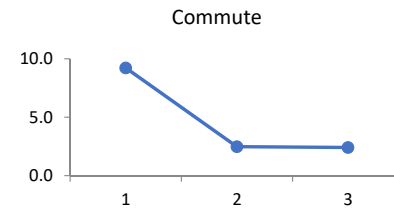
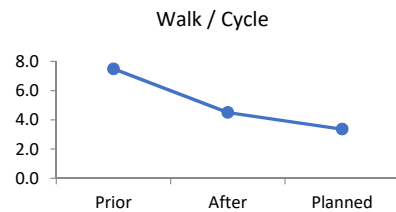
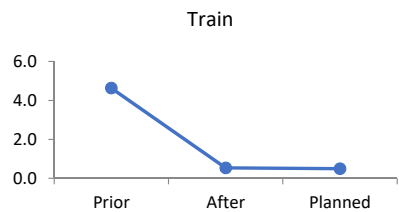
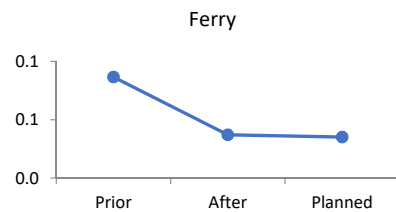
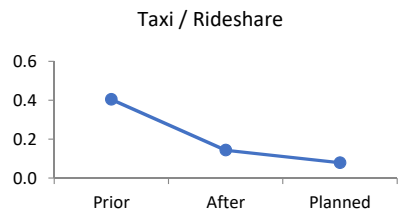
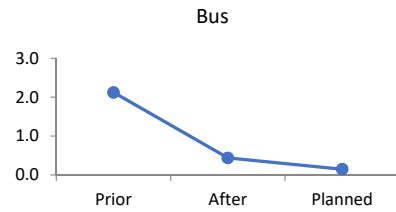
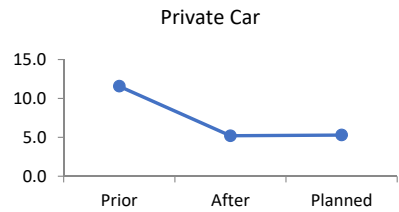
Overall Trips

- We see a significant decrease in the number of trips made for all modes and all purposes

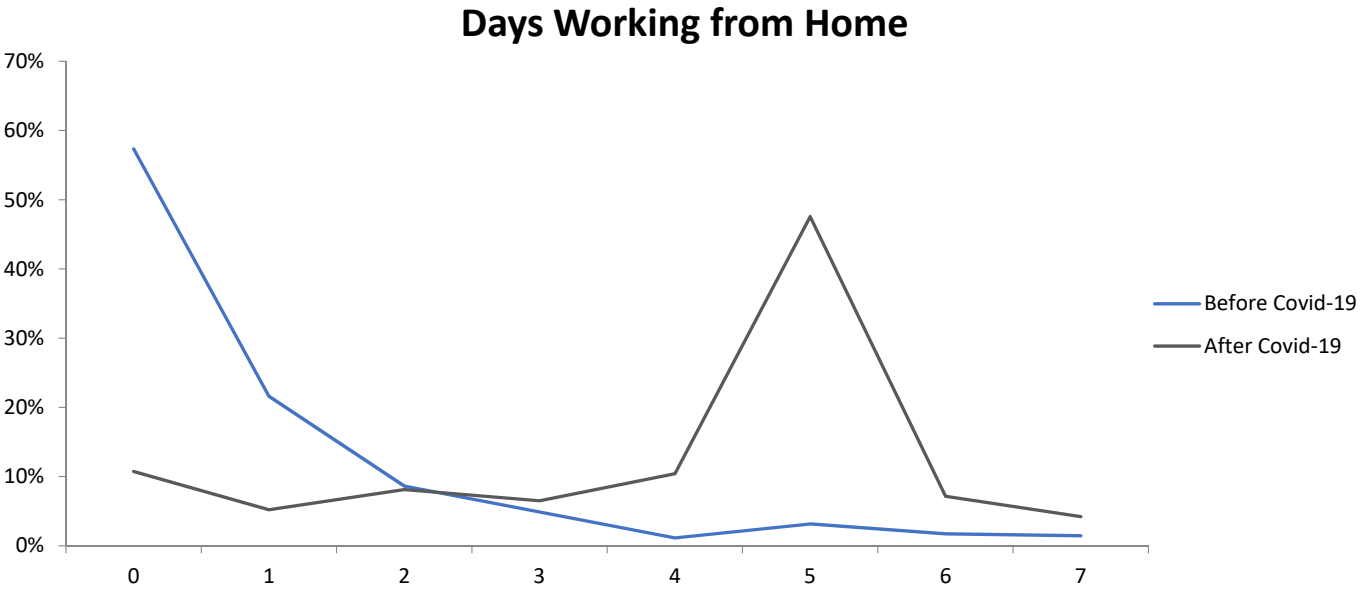


Trips by Mode and Purpose

- This is true for all modes and all purposes



Changes to Work: Working from home is the widespread norm

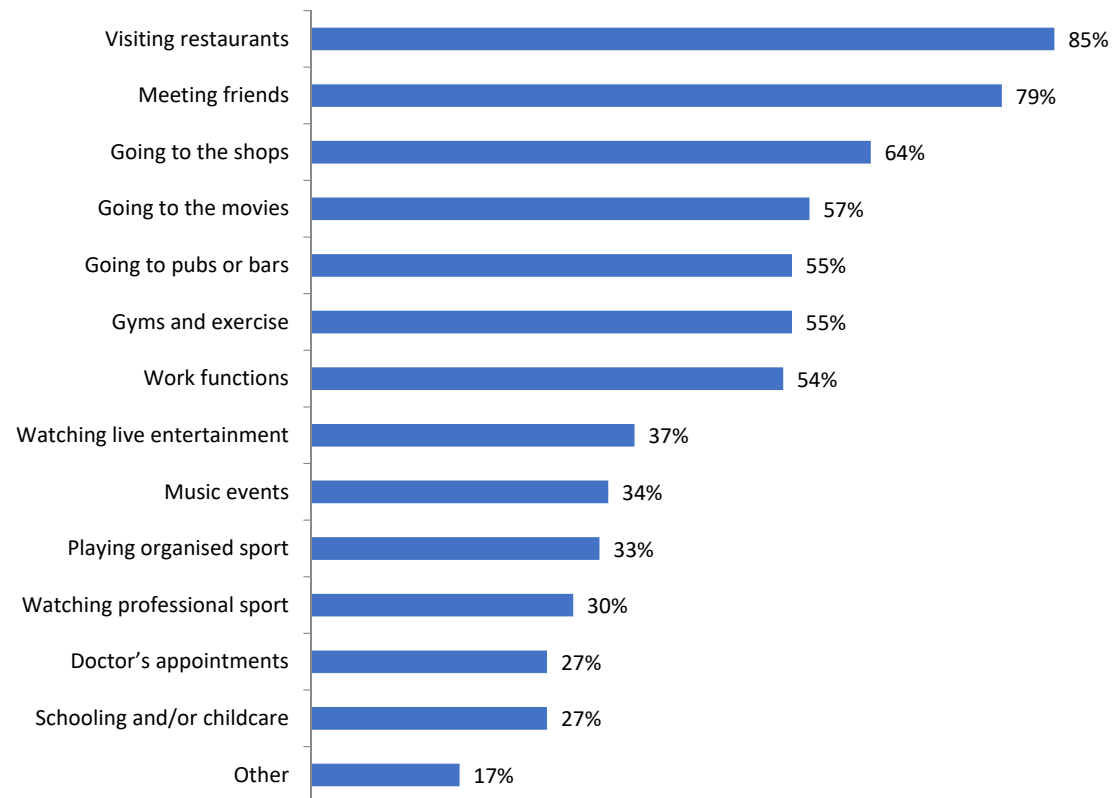


The threat of Covid-19 to...



Interruption to Activities

- Unsurprisingly, the activities people normally engage in have been impacted greatly



Possible MaaS futures

- Two main scenarios as alternative futures on the spectrum within which MaaS can reboot as a **multimodal and multiservice** offering.
- **Scenario 1:** Travel will return to the pre-Covid-19 normal within a few months
 - with PT, ride share and private car use showing very similar levels of use as before = crowding and congestion.
 - Working from home (WFH) will return to 'normal' & have little impact.
- **Scenario 2:** One of the most important policy levers now available, in contrast to pre-Covid-19,
 - is the **effectiveness and growing acceptance of WFH.**

Scenario 1

- The rationale is that, although the situation is somewhat fluid and the likely response is very uncertain,
 - with Australia's success compared to other countries in minimising exposure and transmission ('flattening the curve'),
 - there is a real possibility that normality might return quicker, with perceptions of risk dissipating at a fast rate.
 - NSW Minister of Transport suggested on RA Webinar (20 May) by 'end of year'.
- Habit persistence is also a significant trait of human beings.
- Crowds, described as heaving,
 - at shopping precincts on Mother's day (10 May 2020) in Melbourne and Sydney, despite social distancing requirements in place, highlights this outcome.

Scenario 2

- This evidence, growing anecdotal evidence & the Beck and Hensher (2020) Wave 1 findings from a National Survey
 - suggest the possibility of a noticeable shift to WFH and
 - consequent changes in commuting (and non-commuting) travel demand.
- WFH will be encouraged all the while offices are required to practice social distancing and hence have to stagger working hours for staff,
 - including the possibility of less days in the main office and the balance as WFH.
 - Suggestions of staff groups A and B..... If they return to work (RTW)
- Firms will be interested, as they can save on office space in the 'longer term'
- But we expect that some of the WFH will continue (permanently)
 - Can we have enough the flatten the **nasty and extending travel peaks?**

A preferred Future: Killing off the camel (2 humps) and replacing with a (small) horse (flatten all day at a lower level)!

- **Scenario 2** - we would like to see play out over the next 18 months,
 - with employers supporting **staggered working hours (SWHs)** (even when there is no imposed external constraint to do so) for employees whose work aligns with this strategy, and
 - with the **number of days working from home varying by negotiation**, especially where there is substantive evidence of **no productivity loss** and desirably **productivity gain**.
- This is an opportunity for the sustainability charter of businesses
 - supporting mandating increased flexibility of office hours as a consequence of social distancing,
 - obliging a number of businesses to introduce SWHs, and only requiring attendance at the main office on an agreed number of days per week.

Back to the Past – No Thank You!

- WFH is a new policy lever to use to benefit the transport network
 - ‘New’ in the sense that there is a much broader interest in WFH given the forced circumstance.
- Telecommuting is not new, but has always struggled to get support from either employees or employers,
 - especially where the matching of employees and employers is required for it to be implemented.
- In particular, we want to **never return to the peak phenomenon**
 - where we have excessive road congestion (**‘carmegeddon’**), and public transport crowding

The MaaS Reboot

- Although operational changes will be required to support a more hygienic shared mode environment,
 - they are **a necessary but not sufficient condition** for a significant return to public transport & ridesharing.
- The challenge is to get people back to public transport & ride share
 - and more generally away from the private car.
 - But until a vaccine is widely available, this **may be** up to 2 years
- Without WFH and parking charges, in the absence of road pricing reform, we are unlikely to tame road congestion (car use) and
 - we risk growing the modal share in favour of the private car, and
 - **a significant setback for MaaS, not only as a niche offering but as a scalable prospect.**

The MaaS Reboot

- Under scenario 1, we might expect MaaS in Australia, and more generally any Covid-19 affected economy,
 - to reboot pretty much along the same lines as pre-Covid-19.
 - It is under scenario 2 that MaaS may have **the greatest challenges, but also opportunities, at least in the foreseeable future.**
- MaaS may be a way of arresting a decline in public transport use by offering a first and last mile rideshare discount where the convenience of public transport is in place,
 - although how we resolve the matter of hygiene in Uber and taxi remains a concern.
- **The resurrection of public transport as the centrepiece of MaaS may have to take a back role for a little while, as indeed will rideshare.**

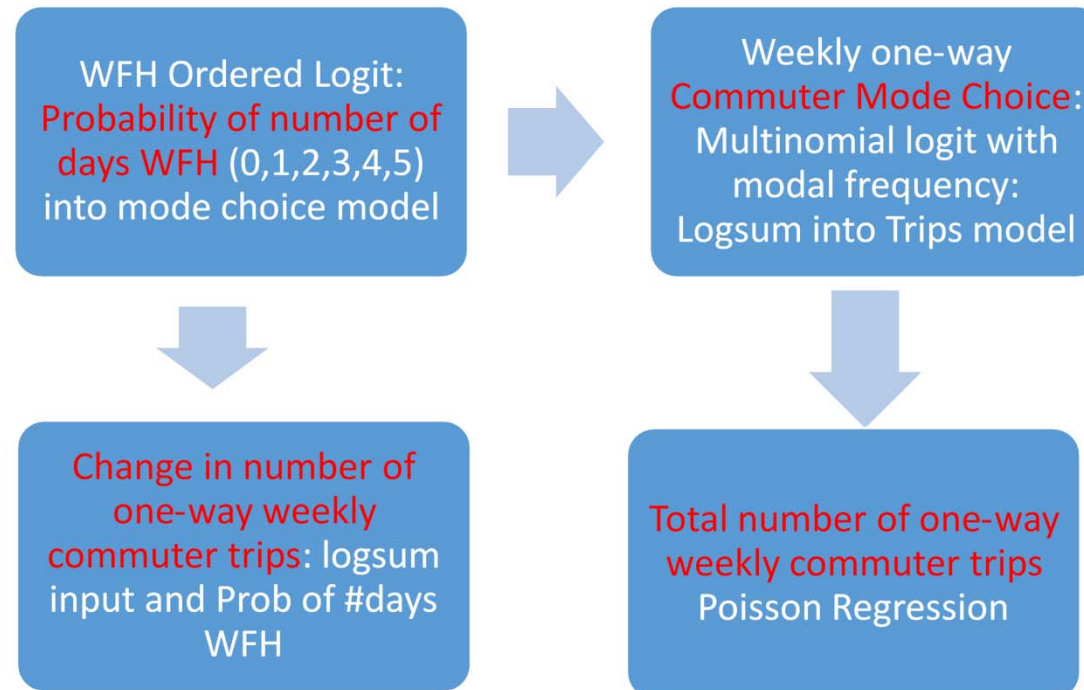
The MaaS Reboot Recommendation

- Under Scenario 2, a bundle consisting of
 - flexibility in choosing the subscription period,
 - a micro-mobility mode for short local trips (up to 10kms),
 - a shared car for **familiar sharers** that is coordinated through the broker, and
 - a rental car for individual use,
 - PLUS a multi-service rethink (see Sampo's comment to me below).
- May be a good first start as a reset offer after rebooting MaaS.
- Importantly, there may still be a need for the private car outside of the MaaS offer,
 - but the offer may result in a reduction of the number of private cars in a household.
- Under Scenario 1, MaaS can resume as before but we might want to take advantage of prospective opportunities under Scenario 2, where possible.

Sampo Hietanen (MaaS global) remarked: '...a really insightful article as usual. I would want to pick your brains in scenarios where MaaS is combined with housing. I see that combining those two is going to be ultimately the big breakthrough and have enormous impact on society. This is me agreeing with you on the paragraph in page 4 about 'service' being the key. I see that aspect being forgotten when we go through current issues of getting going'.

A Revised Strategic Modelling Framework

(developed by David Hensher and colleagues at ITLS)



UNDERSTANDING MOBILITY AS A SERVICE (MaaS): Past, Present and Future

Testimonials

“This book is an important contribution to the growing interest in MaaS and provides a thoroughly researched reference source. The book is an enjoyable read and should be on the bookshelves of all professionals interested in getting an up to date briefing of the MaaS journey to date. The authors have really gone through the materials existing to date and point out level of understanding we have at the moment. In particular the chapter 2.5 in which modal efficiency and the rationale for integration is discussed is an important contribution to knowledge. I commend the authors for this stimulating book.”
Sampo Hietanen, Founder CEO - MaaS Global

“This book is an important contribution to the growing interest in Mobility-as-a-Service (MaaS). It should be an important reference for academics as well as practitioners in clarifying the concept as well as providing an up to date summary of research on MaaS. Even though all chapters are important contributions, I found the chapter on institutional barriers and governance particularly interesting to read in that it not only describes the challenges associated with but proposes strategies by which the development and diffusion of MaaS could be addressed. I commend the authors for an interesting and stimulating book.” **I.C. MariAnne Karlsson, Professor and Head of Division of Design & Human Factors, Department of Industrial and Materials Science - Chalmers University of Technology**

“This book is a critical examination of MaaS globally and shows a coherent depth of research that we have not seen to date. It will become the definitive source for MaaS and its honesty and analysis means that it will be a benchmark for the state of MaaS. The chapter on pilot programs for MaaS provides a holistic review of global initiatives that draws on some of the successes and limited wins for MaaS and shows why MaaS has started to work and in some instances why it hasn't succeeded as well as planned, but this feeds directly into the next chapter that then asks the critical question for businesses and cities alike 'What is the potential for MaaS'. I recommend that this book becomes essential reading and reference for all mobility professionals”. **Andy Taylor, Strategy Director - Cubic Transportation Systems, Inc.**

<https://www.elsevier.com/books/understanding-mobility-as-a-service-maas/hensher/978-0-12-820044-5>

The University of Sydney



Understanding Mobility as a Service (MaaS)

Past, Present and Future

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ISBN: 978-0-12-820044-5
EDITION: 1
PUB DATE: July 2020
LIST PRICE: RRP AUD 195, RRP NZD 255
FORMAT: Paperback
TRIM: 6w x 9h
PAGES: c. 240

Examines all facets of MaaS, assessing its role in the evolution of today's and tomorrow's transport systems

KEY FEATURES

- Includes case studies to show how MaaS is delivered around the world
- Covers foundational aspects of MaaS, clarifying what it is for those new to the concept
- Offers an in-depth analysis on a wide range of MaaS topics including governance, contracts, consumer and supplier preferences, links to societal objectives, the role of trials, assessments, and more

DESCRIPTION

The widespread adoption of smartphones, ridesharing and carsharing have disrupted the transport sector. In cities around the world, new mobility services are both welcomed and challenged by regulators and incumbent operators. Mobility as a Service (MaaS), an ecosystem designed to deliver collaborative and connected mobility services in a society increasingly embracing a sharing culture, is at the center of this disruption.

Understanding Mobility as a Service (MaaS): Past, Present and Future examines such topics as:

- How likely MaaS will be implemented in one digital platform app
- Whether MaaS will look the same in all countries
- The role multi-modal contract brokers play
- Mobility regulations and pricing models
- MaaS trials, their impacts and consequences

Written by the leading thinkers in the field for researchers, practitioners, and policy makers, *Understanding Mobility as a Service (MaaS): Past, Present and Future* serves as a single source on all the current and evolving developments, debates, and challenges.

The authors dedicate this book as a contribution to the Volvo Research and Educational Foundations (VREF) Bus Rapid Transit (BRT+) Centre of Excellence (<http://www.brt.c/>) and the iMOVE Cooperative Research Centre (CRC) (<https://imoveaustralia.com/>).



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