

# The Market for MaaS

## Research Showcase

Shining the Spotlight on MaaS Research

18 July 2018

by

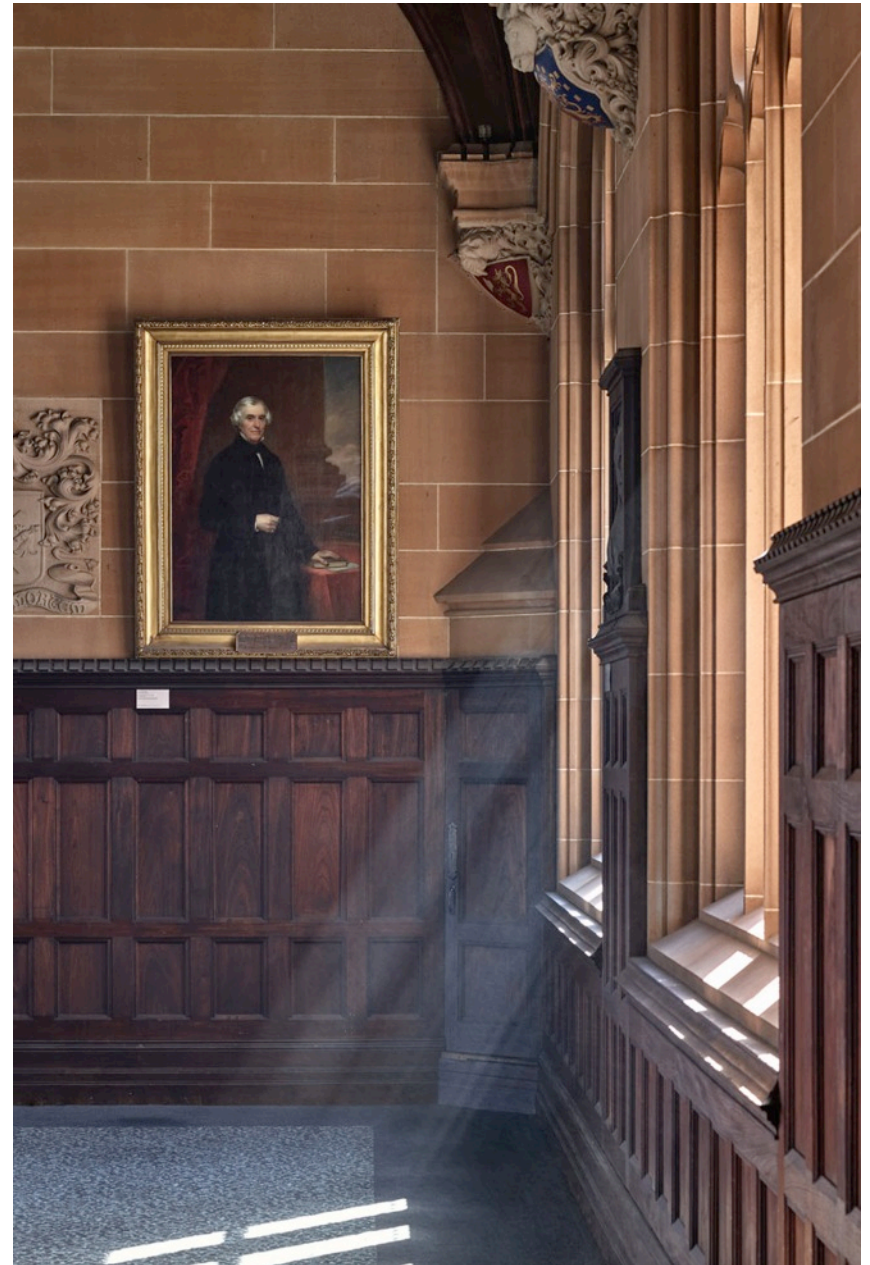
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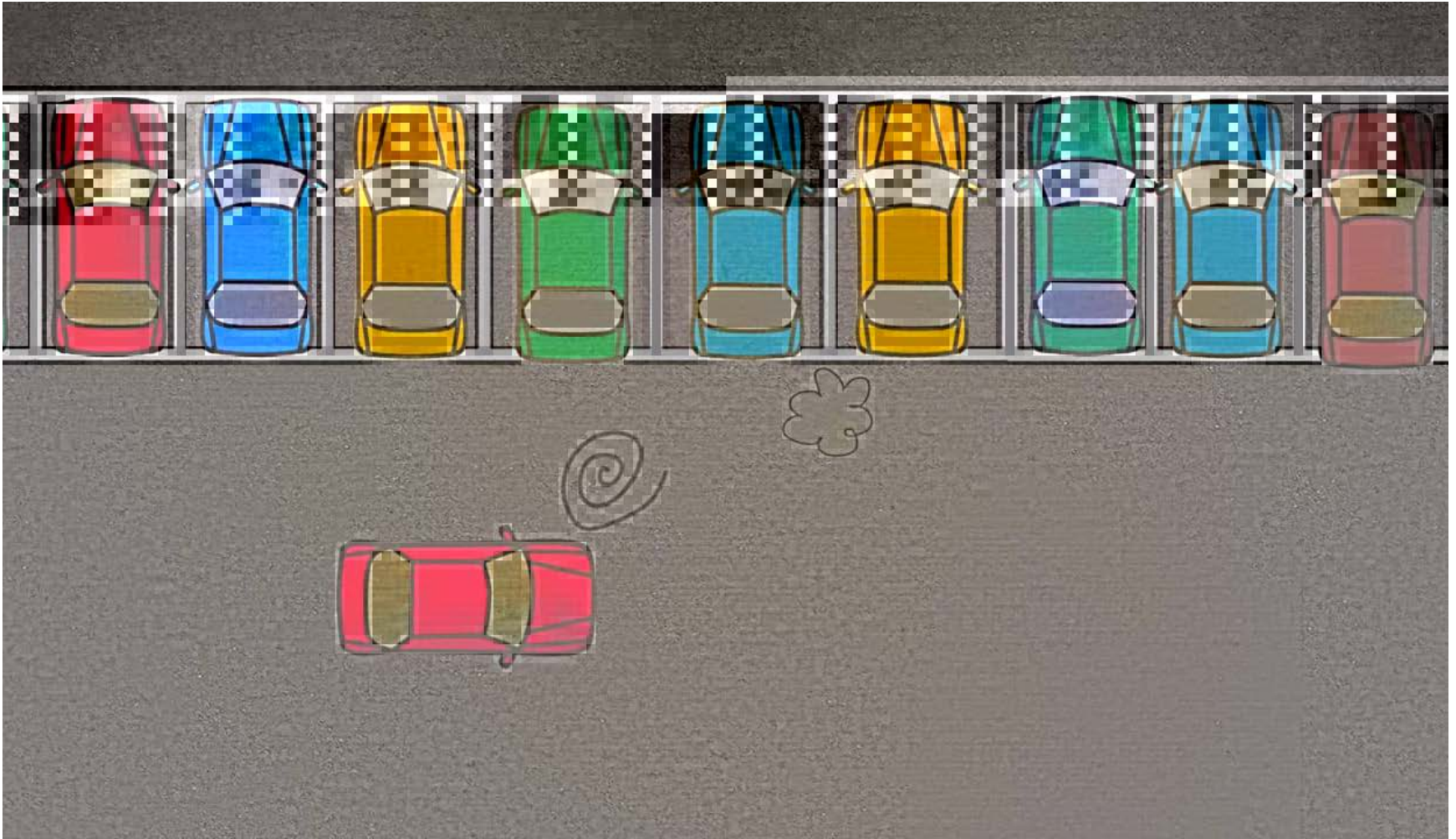
The University of Sydney Business School

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



# Mobility as a Service: A Concept



Source: <https://vimeo.com/96486671>

# Mobility as a Service: A Working Model

Clip slide

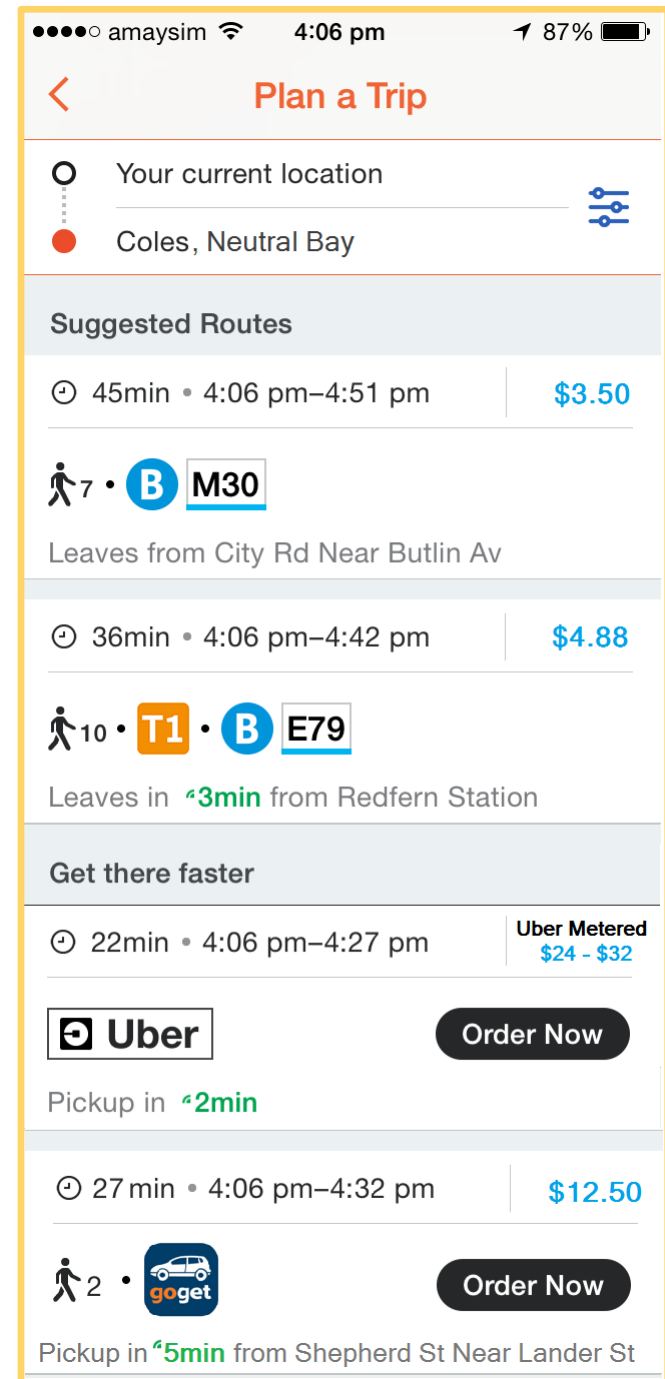
## Current MaaS Packages – Offered Today





# Summarising the Concept

- One-stop access to a range of mobility services across PT and private modes
- Real time information, instant journey planning, booking, and billing
- Major players brought together diverse stakeholders
- Operate on the **3Bs** future (Hensher):
  - **Bundles:** granting customers a defined volume of access, with a specified LOS
  - **Budgets:** matching customer needs/WTP more closely with service supply
  - **Brokers:** choosing the business models around which MaaS will be delivered
- Benefits to users, providers, and society



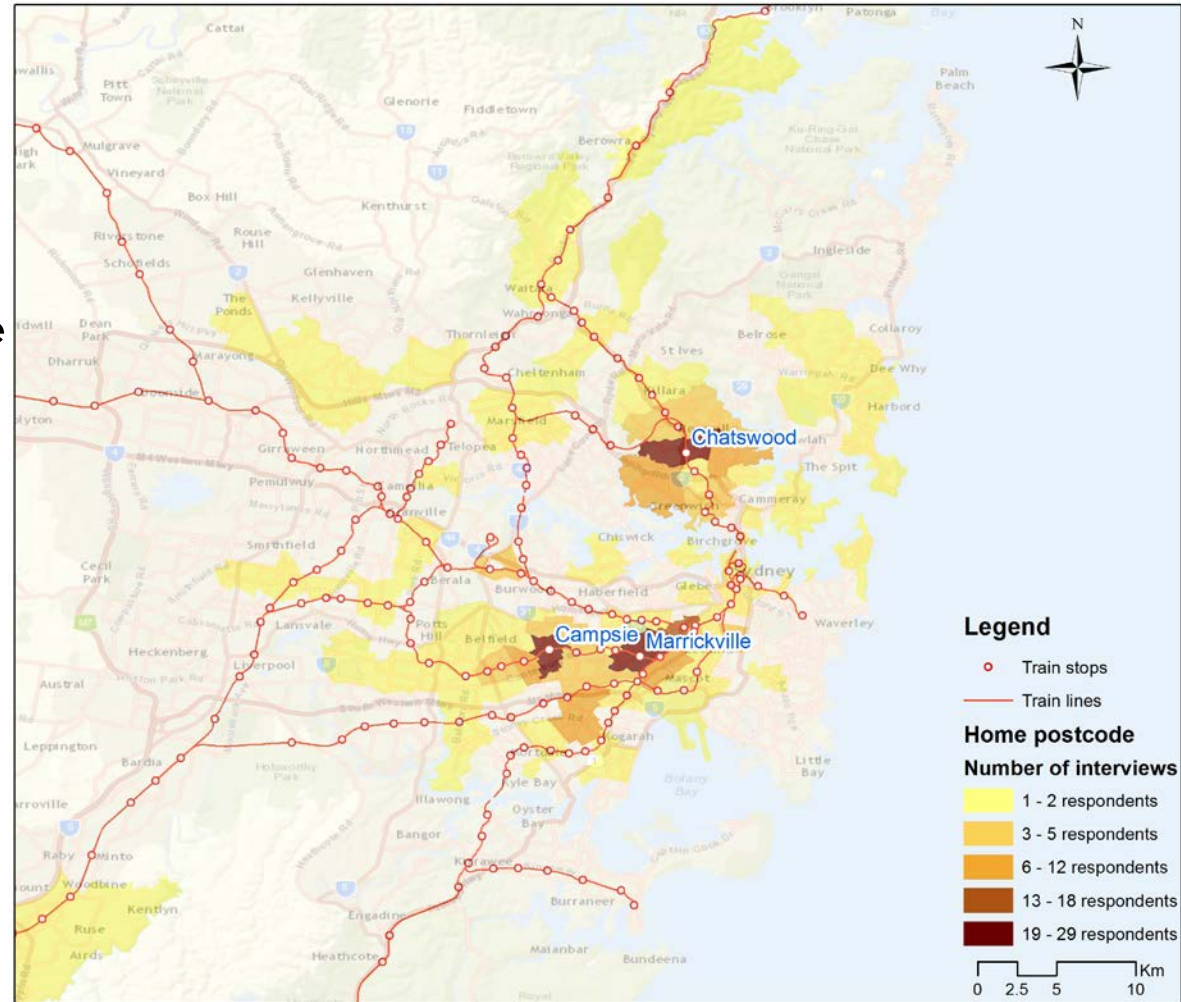
# Service Delivery Models

Yale's talk today

# The Customer Preference Study

## SYDNEY, AUSTRALIA

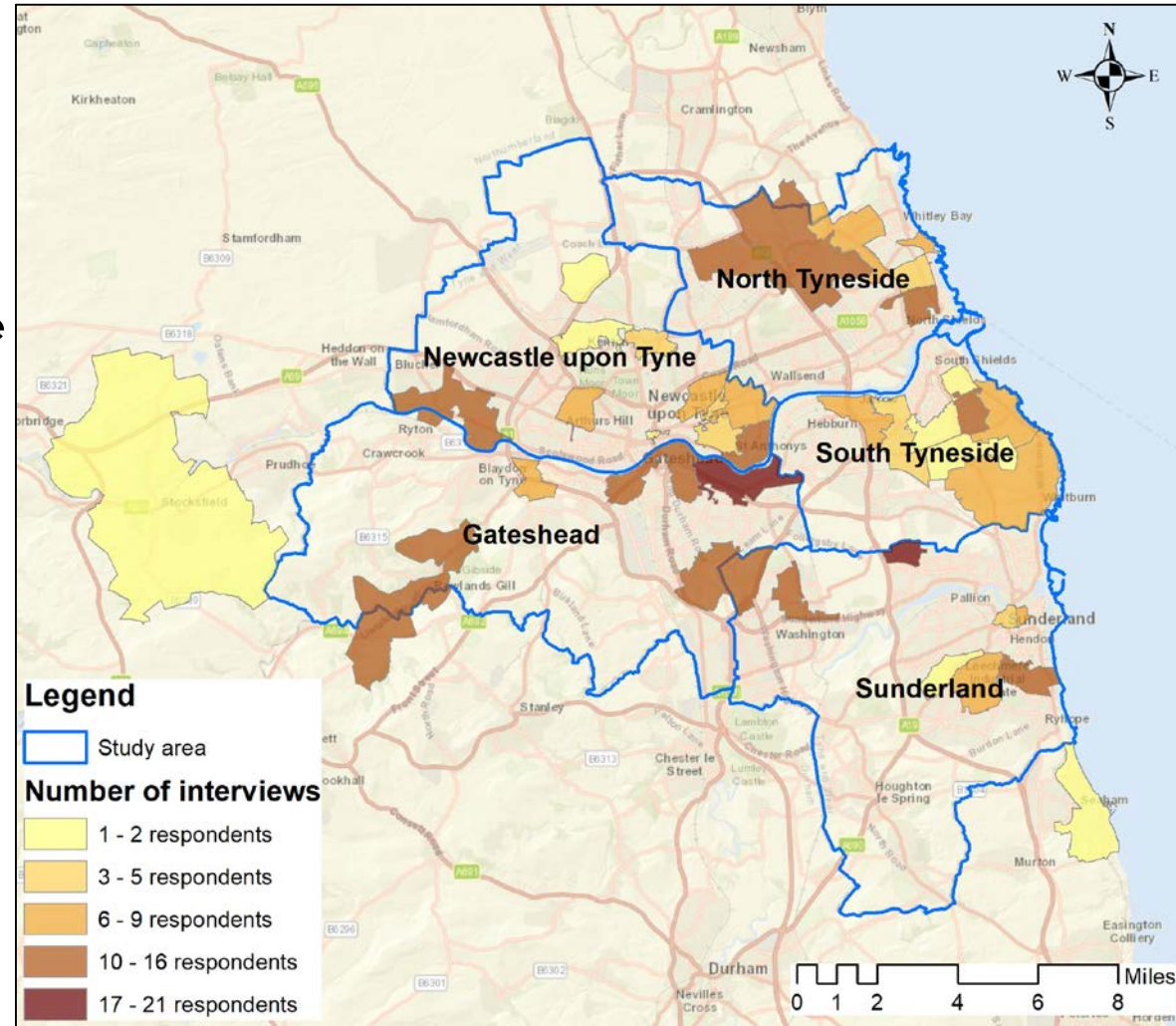
- CAPI face-to-face
- 252 interviews from Mar to Apr 2017
- Took 17 mins on average with std. dev = 5 mins
- All people 18+ are eligible with no quotas



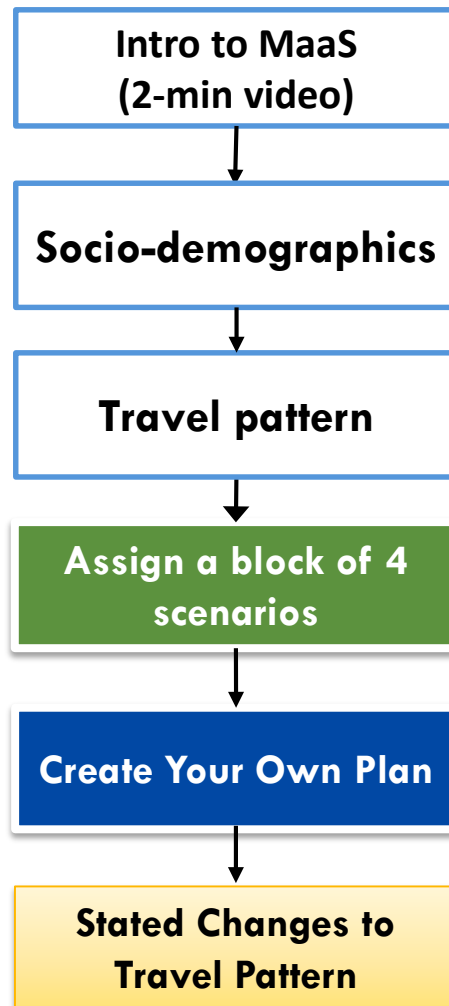
# The Customer Preference Study

## TYNESIDE, UK

- CAPI face-to-face
- 290 interviews in Feb 2018
- Took 17 mins on average with std. dev = 8.6 mins
- All people 18+ are eligible with no quotas























# The Survey Flow















# The SP Experiment in Sydney

## Scenario 1 (of 4)

| Your Current Travel Record<br>\$345 /fortnight   | Plan A<br>\$150 /fortnight   | Plan B<br>\$115 /fortnight  | Pay-As-You-Go Plan<br>\$15 /fortnight   |
|--|--|---|---|
|  8 trips<br>4 days                |  Unlimited trips<br>6 days  |  Unlimited trips<br>6 days  |  Pay as you go   |
|  10 hours, 292 km<br>over 10 days |  13 hours<br>(10 hours = 1 day)<br>+ 30min advance booking<br>+ <b>round-trip</b> car sharing |  7 hours<br>(10 hours = 1 day)<br>+ 15min advance booking<br>+ <b>one-way</b> car sharing |  \$8.5/hour + 40c/km<br>capped at \$85/day<br>+ 60min advance booking<br>+ <b>round-trip</b> car sharing |
|  Full fare                        |  20% discount   |  10% discount   |  10% discount  |
|  Full fare                        |  20% discount   |  10% discount   |  10% discount  |
|  N/A                             |  Unused credits will<br>roll-over to next period   |  Unused credits will be<br>lost (use it or lose it)                                      |  Pay-As-You-Go  |
| <input type="radio"/> I'll continue doing what I'm doing   | <input type="radio"/> I'll buy this plan   | <input type="radio"/> I'll buy this plan  | <input type="radio"/> I'll buy this plan  |

# The Safety Net: CIY Plan (in Sydney)

| Your Current Travel Record<br>\$345 /fortnight  | Create Your Own Plan<br>\$278 /fortnight  |
|---|---|
| <br>8 trips<br>4 days                | <br>4 days unlimited use  |
| <br>10 hours, 292 km<br>over 10 days | <br>2 days <input type="text" value="60"/> mins advance booking<br>8 hours <input type="text" value=""/><br><input checked="" type="radio"/> One-way <input type="radio"/> Round-trip |
| <br>0 trips<br>Full fare             | <br><input type="radio"/> 10% discount<br><input checked="" type="radio"/> 20% discount   |
| <br>0 trips<br>Full fare             | <br><input checked="" type="radio"/> 10% discount<br><input type="radio"/> 20% discount   |
| <br>N/A                              | <br><input checked="" type="radio"/> Unused credits rolled over<br><input type="radio"/> Unused credits lost  |

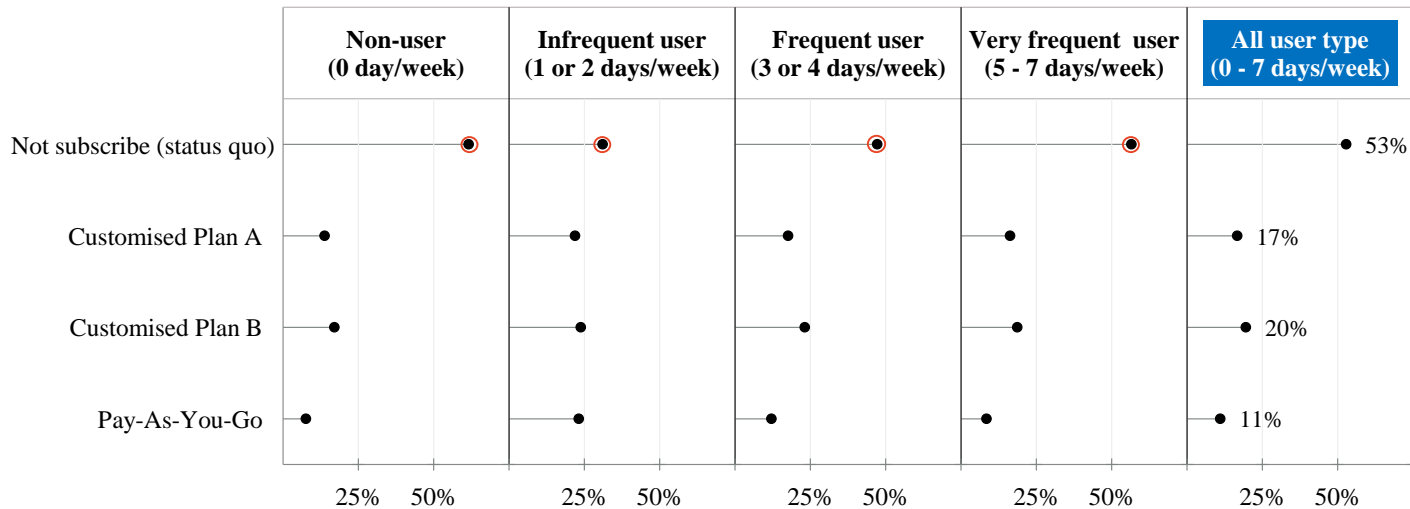
If the Plan you created above were available today, would you buy it? ☐ Yes ☐ No

Back

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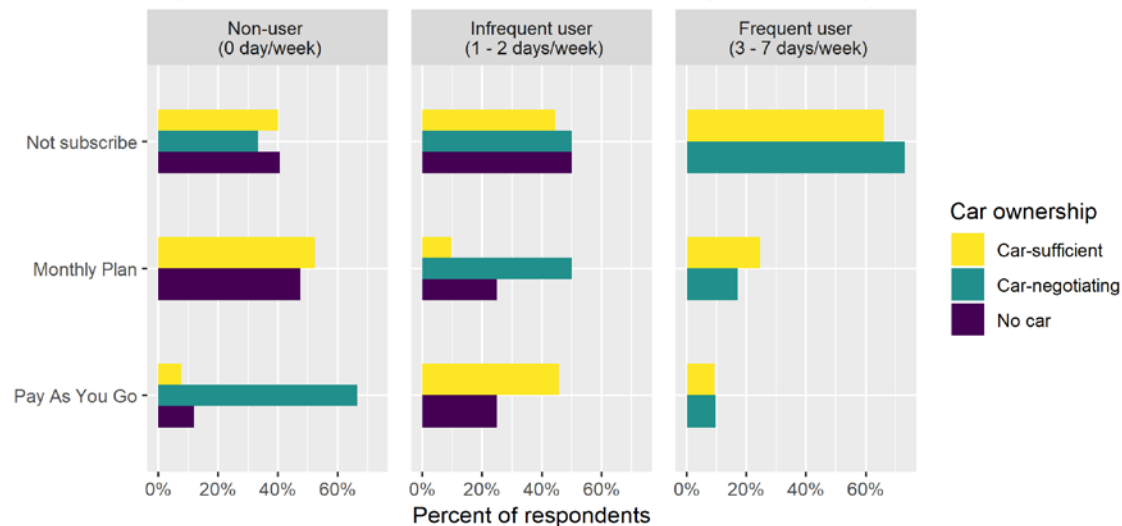
# Car Use and MaaS Uptake in Sydney

Stated shares of MaaS Options in the presence of status quo by type of car user



Data source: MaaS survey (this study)

Impact of car use and household car ownership on MaaS uptake



## Main Reasons for Not Taking Up MaaS

# Sydney



“I prefer the freedom and privacy and flexibility of my own car”

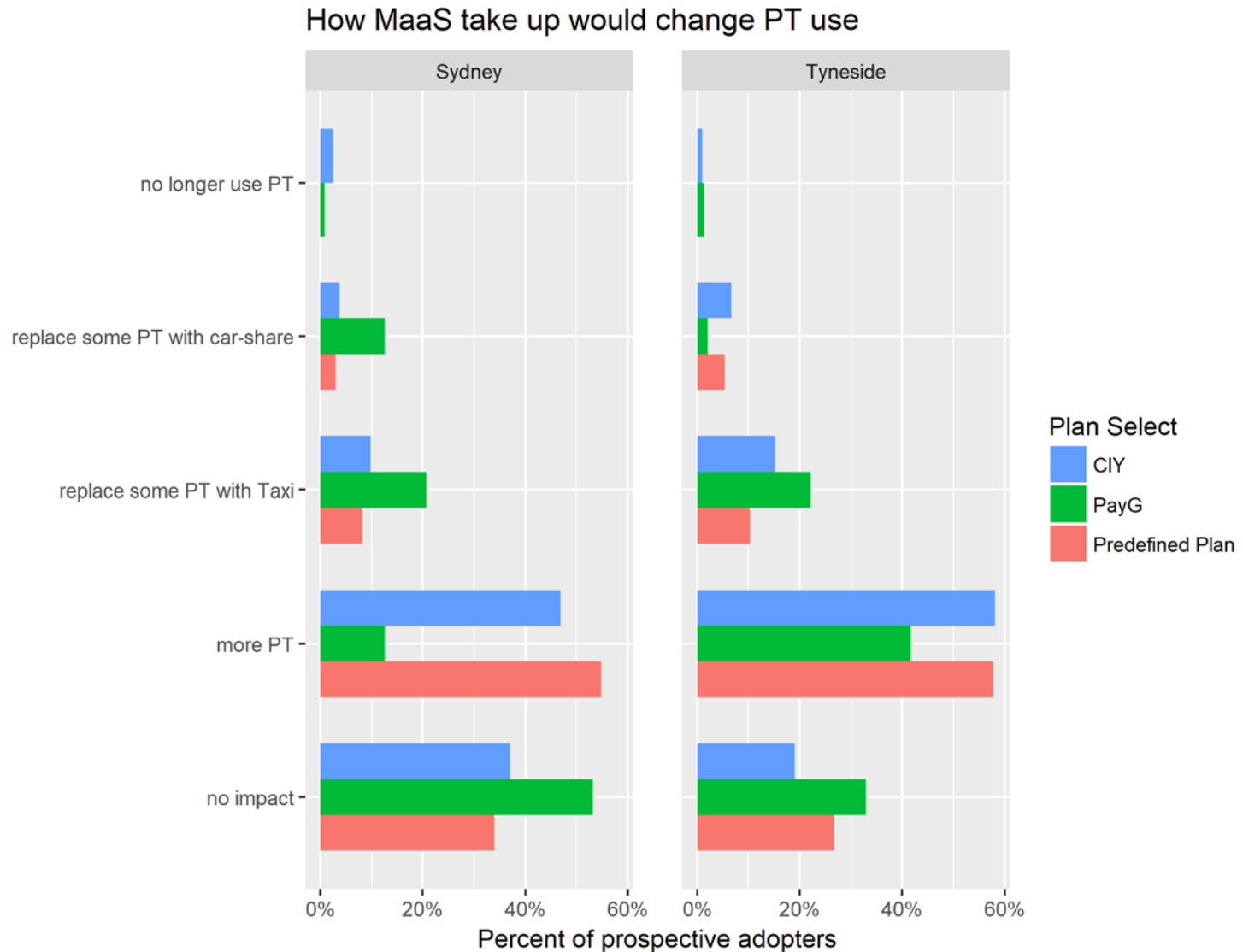
# Tyneside



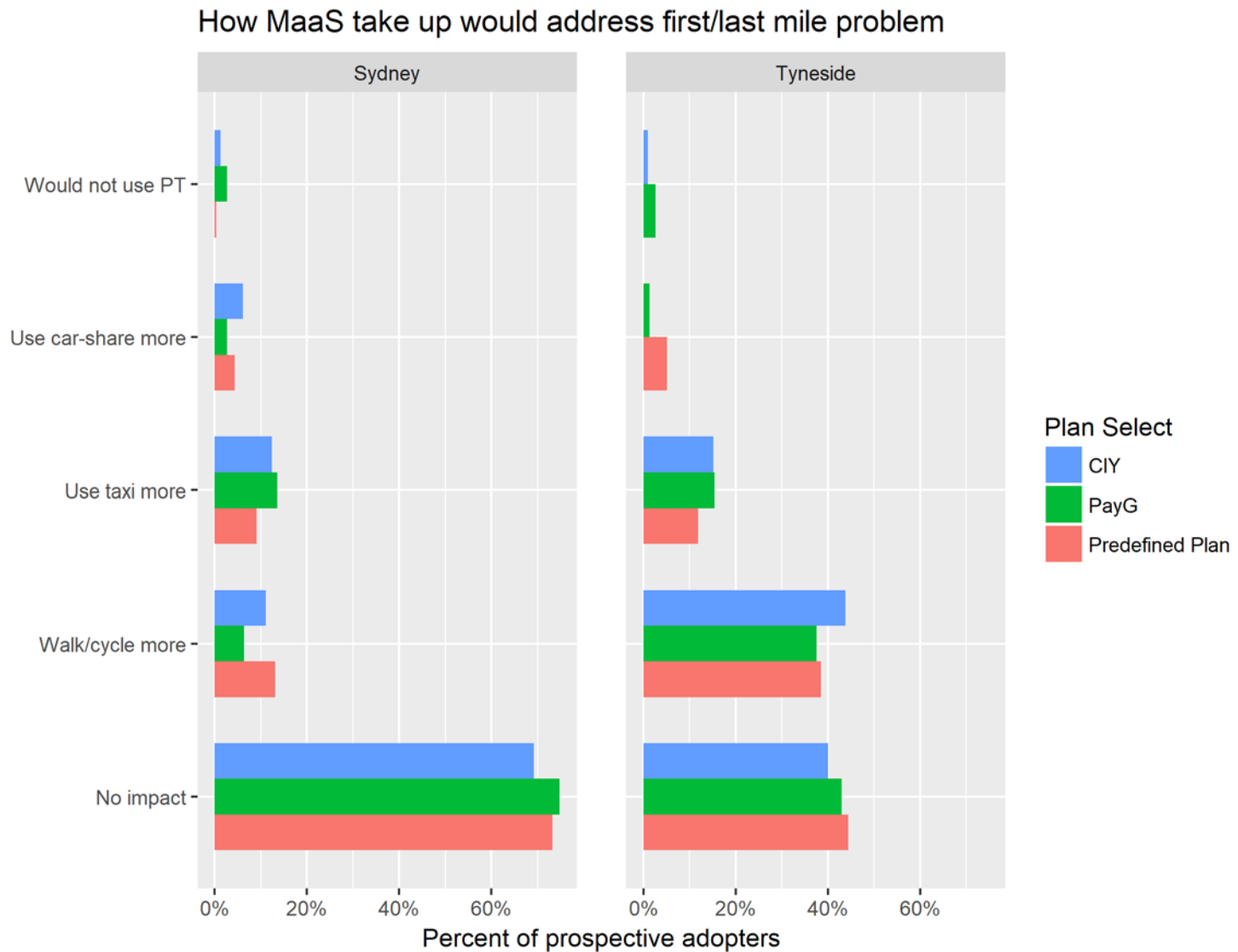
*“can see benefits and costs look good but it about time and convenience and transporting children ...”*



# Impact of MaaS Uptake on PT Use



# Will MaaS Address First/Last Mile Issues of PT Use



# WTP for Mobility Entitlements in Sydney

| MaaS component                                    | WTP (\$/fortnight) |
|---|--------------------|
| An hour access to car-share                       | \$6.39             |
| A full day access to car-share (10 hours)         | \$63.85            |
| One-way car-share                                 | \$7.27             |
| Round trip car-share                              | \$0.00             |
| Every 15 minutes increase in advance booking time | -\$1.06            |
| A day of unlimited PT use                         | \$5.92             |
| 10% discount to every taxi bill                   | \$3.68             |
| 10% discount to every ride-sharing bill           | \$7.18             |

# Decision Support System (DSS) for Tyneside

Please select mobility features and the amount you want for one month worth of travel

## Transport feature to be offered to the consumer

## Monthly Plan

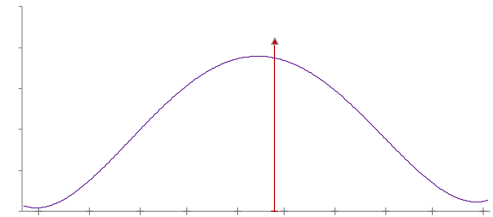
|                  |   |                               |
|------------------|---|-------------------------------|
| Car share        | How many days of <b>unlimited use</b> of car-sharing appropriate for long distance travel or weekend away   | 5 days unlimited use          |
|                  | Do you want to offer a <b>back-to-base</b> or <b>one-way</b> car-sharing? back-to-base returning the car to where it is taken from. one-way returning the car to any pod you operate            | Back-to-base                  |
|                  | Number of hours access to car-share appropriate for quick drop-off, pick-up, or short trip  | 10 hours across multiple days |
| Public transport | How many days of unlimited use of public transport? includes bus, train and tram services.  | 10 days unlimited use         |
| Taxi Discount    | How many percent discount to every taxi bill would you want? many people don't use taxi on a regular basis; a percentage discount will be attractive to everyone, regardless of usage frequency | 10% discount                  |
| Bike share       | How many hours of free-floating bike share Once finished, you can return the bike anywhere  | 0 hours                       |
| Credit           | Do you want to offer a transfer any un-used credits to the next month?  | No                            |
| Price            | How much would you charge to provide the monthly plan above?  | £ 250                         |

Average WTP for this Monthly Plan

£234

Standard deviation of WTP for this Monthly Plan

£78

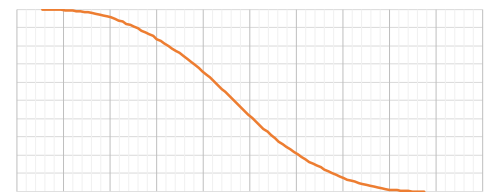


\* Caution: this model is estimated using sampled respondents aged 18+ from Tyneside. Caveat must be taken when using the model outside of Tyneside area, especially if the mix of population and transport options differ from that of Tyneside.

Percent of the population would buy this plan at your given price

42%

Total area under the curve and on the right of the red arrow (your price)





# Conclusions

- Understanding customer need is critical for the success of MaaS
  - Current travel patterns are most important to MaaS uptake
  - Importance for packaging and pricing (i.e., bundles and budgets)
  - Importance of market segmentation
  - Preferences need to be updated over time with on-going research capturing changing experience
- For a significant proportion of the population, cars will still be king
  - People value the convenience of their own cars
  - They see benefits of MaaS but are not willing to sacrifice their cars
  - MaaS is better a substitute for second household car, but not the only one
- Impact of MaaS on public transport use varies by business model
  - PayG business model increases uptake but promotes less sustainable choices
  - WTP for car-share is more or less the same as market price but WTP for PT is much lower than daily cap: cross-subsidy is required.