CUBIC | **Transportation Systems**

Future of Ticketing

Tim Roberts – Head of Business Development for UK Rail

June 19

Future of Rail Ticketing – Some thoughts

- Gradual removal of paper tickets

- Provision of PAYG in urban and other densely populated areas ("islands")

  - *Alternative solution for unbanked*

- Mobile retail and validation proposition important

- Provision of a suitable ticketing type for long distance travel ("bridges")
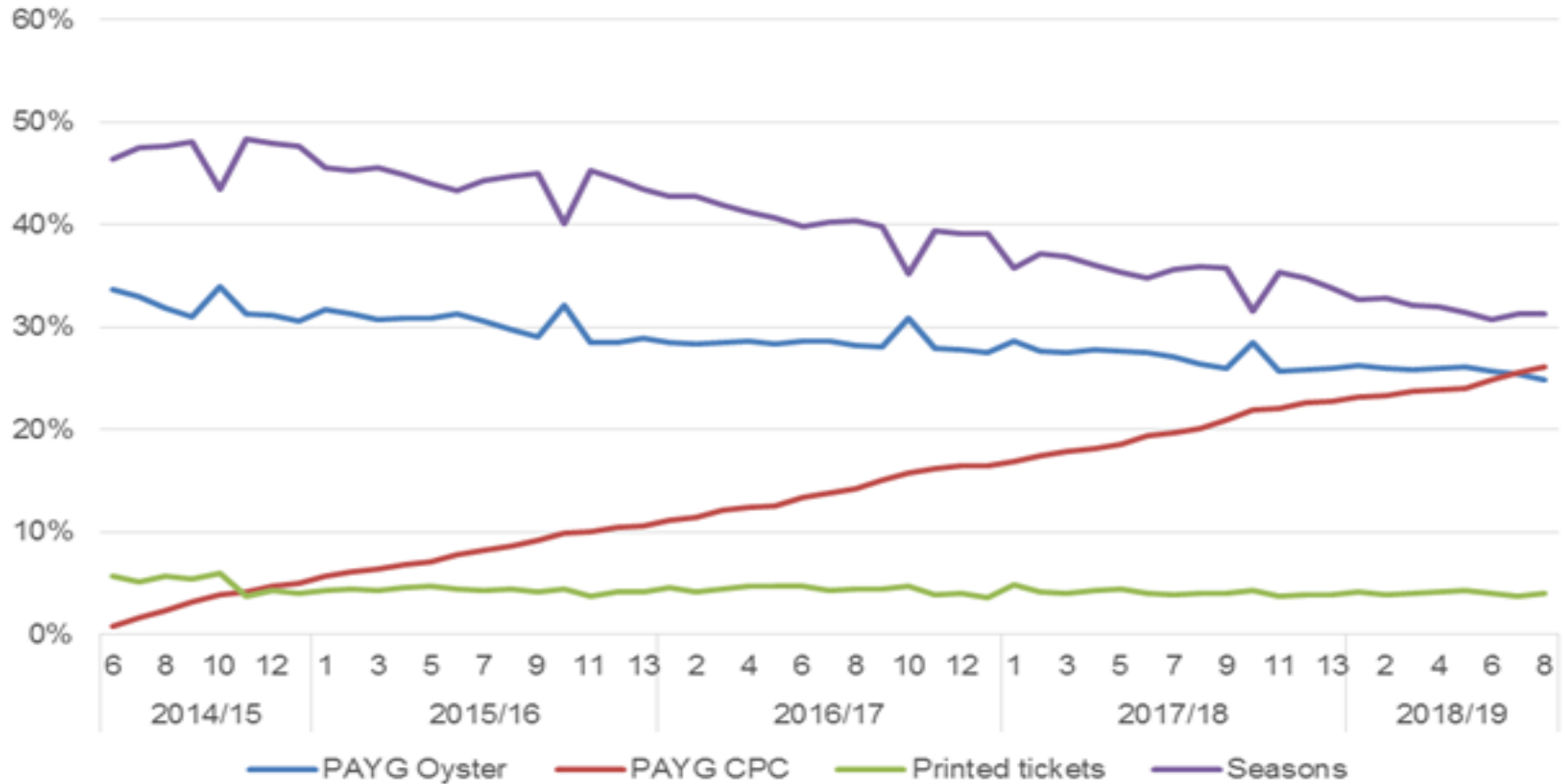
PAYG for "Islands"

- Better customer proposition leading to "best fare" guarantee and capping

- Ease of use increases travel and also potentially reduces revenue leakage

- Reduced cost of sale for operators since no need to "buy" a ticket

- Short term solution could be ITSO (as in ASR, GTR, SWR) but EMV seems to be the likely medium term solution

    - *Most people have an EMV card and the banks pay for provision of that card*

Bus and LU Journeys by Ticket Type

Ticketing for "Bridges

- Difficult to predict which medium will win out

- Magnetic tickets remain an effective proposition but there is a general consensus to phase them out

- Barcode growing in use

  - *Offers a mature mobile proposition*
  - *"Print at home" offers a reasonable non mobile ticket*
  - *Can concerns on fraud issues be overcome?*

- A Smart card alternative possible

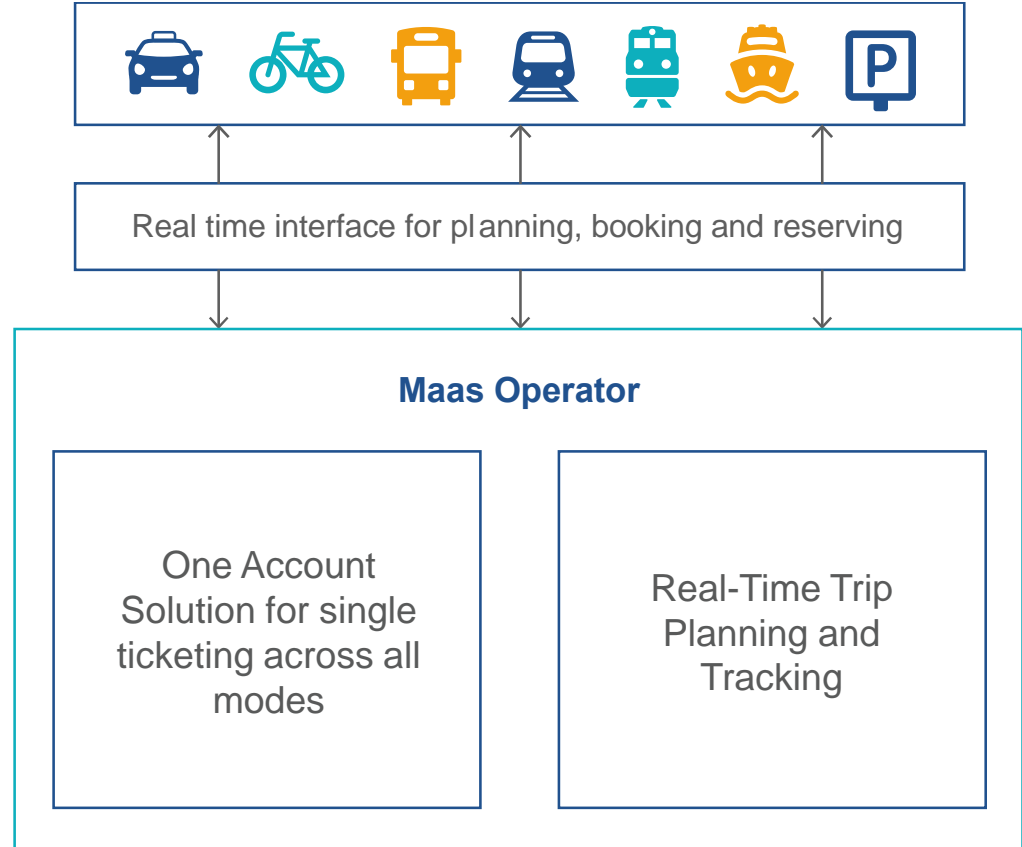 - *ITSO, EMV (Card as an Authority to Travel)*

Major city upgrades to EMV using Cubic

	ABT	Open Payment	PAYG	Mobile	Existing Closed Loop	Open Transit Token	Open APIs	Txn /day (M)	
London	✗	✓	✓	✓	✓	✗	✗	14.0	2014
Chicago	✓	✓	✓	✓	✗	✓	✓	1.6	2013
Vancouver	✓	✓	✓	✓	✓	✓	✓	1.5	2018
Sydney	✗	✓	✓	✓	✓	✗	✓	2.2	2018
New York	✓	✓	✓	✓	✗	✓	✓	7.4	2019
Boston	✓	✓	✓	✓	✗	✓	✓	1.6	2020
Brisbane	✓	✓	✓	✓	✓	✓	✓	0.5	2020

CUBIC. | Transportation Systems

Next Steps Beyond PAYG

What is important in MaaS?

- Multi-modality?
- End to end ticketing?
- Real time adjustment?
- Which transport modes?
- Subscription models?
- Ease of use?

Real time interface for planning, booking and reserving

Maas Operator

One Account Solution for single ticketing across all modes

Real-Time Trip Planning and Tracking

CUBIC. | Transportation Systems

Summary of the Future

- PAYG and EMV likely for urban areas in the medium term

- A suitable alternative for long distance – may be barcode

- Reduction in use of paper ticketing and in time phasing out of magnetic

- Mobile use will grow for retail and validation

- There is a growing interest in MaaS but a proposition with widespread appeal needs to be developed