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TOMORROW'S TRANSPORT TODAY: MOBILITY ON DEMAND

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Structure

- Why On-Demand Public Transport ?
- Defining On-Demand Public Transport
- Macquarie Park Precinct: Case Study
- Lessons Learnt

Why On-Demand Public Transport ?

What is Driving On-Demand Public Transport

- Drivers
  - Growth of our Cities
  - Investment Prioritisation
  - Service Standards
  - Customer Expectations

- Enablers
  - Technology and Data

- Public Policy Outcomes
  - Efficiency
  - Productivity
  - Livability

future transport

TECHNOLOGY ROADMAP

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Defining On-Demand Public Transport

Citymapper uses smartscreens to tell passengers their location and what's coming next.(Source: Citymapper)

The international experience in on-demand transport (*Public transport?*)

- Bridj (US)

  On-demand bus service (launched 2014); in Boston, Washington, Austin, Kansas

  - Routes demand based, Guaranteed seat, WiFi included, 40-60% less stops (efficiency)
- Chariot (US)

  San Francisco and Austin

  - Routes crowdsourced via an App
- Citymapper (UK)

  London (2017)

  - Travel demand focused, smarter routes to improve bus reputation, test real-time tools
- Via (US)

  On-demand bus service (launched 2013); in New York, Chicago and Washington DC

  - Fully dynamic, on-demand network.

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$7 PER RIDE
in and around Queenstown
savy
savy

Defining On-Demand in the Public Transport context

- **Key Themes**

  Define the **service pattern** *as opposed to travelling on a fixed route*

  Define the **service time** *as opposed to travelling at a set time*

  Travel to/ from a **user defined origin** to/ from **a transport node or a key attractor**

  Utilise **technology to book** (and pay for) a trip **through a mobile application**

- An individual person trip is the focus – the transit journey is personalised
- Accepted service standards are still a key driver
- Services operate within certain parameters (i.e. O's or D's) and are aggregated so is a public transport service rather than a private point to point service
- Support the Strategic Public Transport Network and fit within the Mobility as a Service (Maas) ecosystem

NSW On-Demand Public Transport Trials

“We have on demand movies, on demand food, and finally NSW will have on demand transport” NSW Minister for Transport & Infrastructure Andrew Constance

NSW On-Demand Public Transport Trials: Process

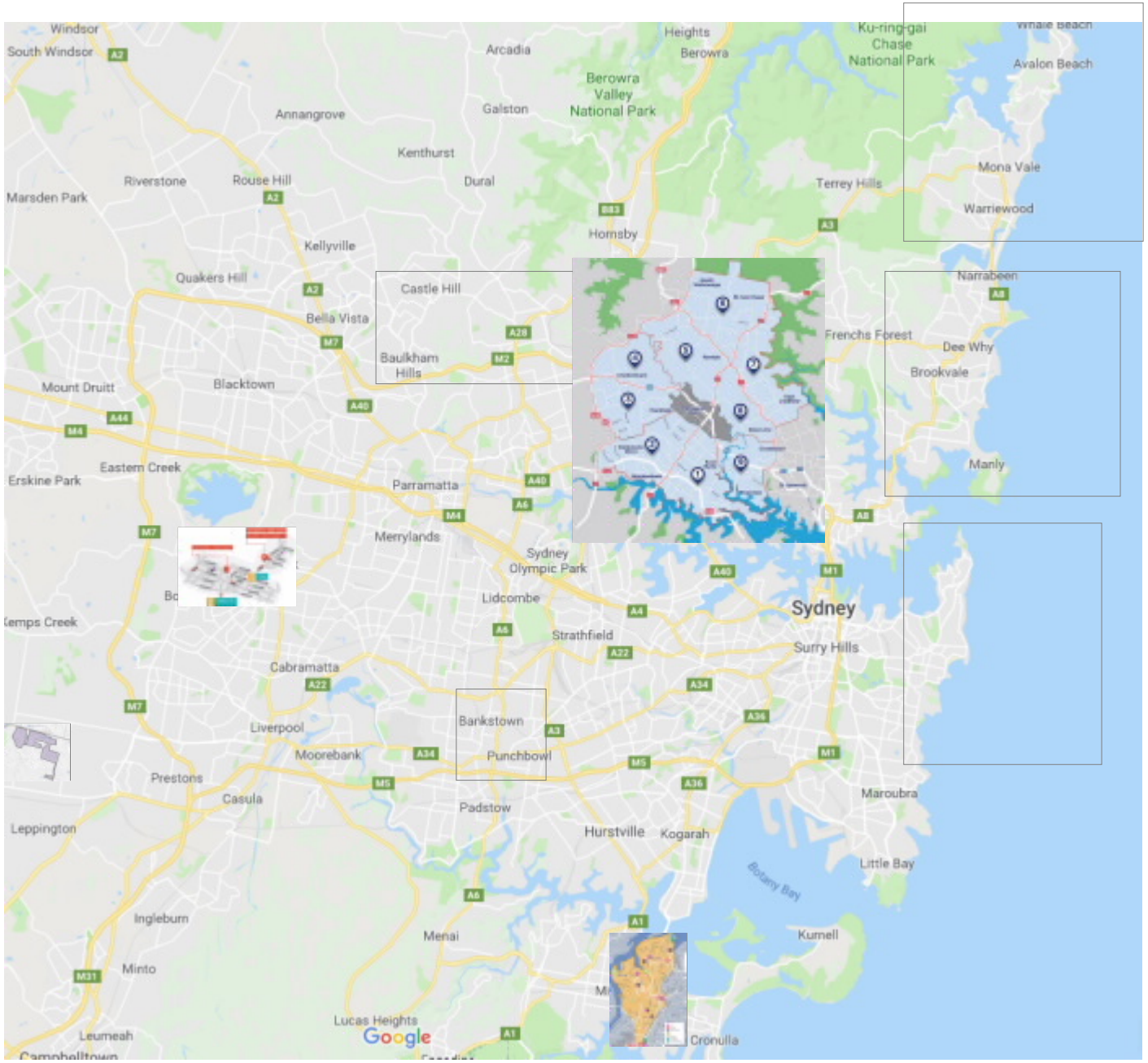
- **NSW Future Transport Technology Roadmap** – The Strategy
- **Procurement** - Structured EOI process; facilitated collaboration
- **Scope of services**

  Operations
  - 1st Mile and Last Mile <> mass transit
  - End-to-end journeys with sub-optimal services
  - Areas with sub-optimal services

  Service Periods
  - Peak, shoulder peak, off-peak or all

  Technology
  - Mandated technology for booking and payment systems to improve customer services
- **Investment in insights** – Performance Reporting, Lessons learnt for future development of similar services in NSW, Australia and internationally

NSW On-Demand Public Transport Trials: Operating Locations



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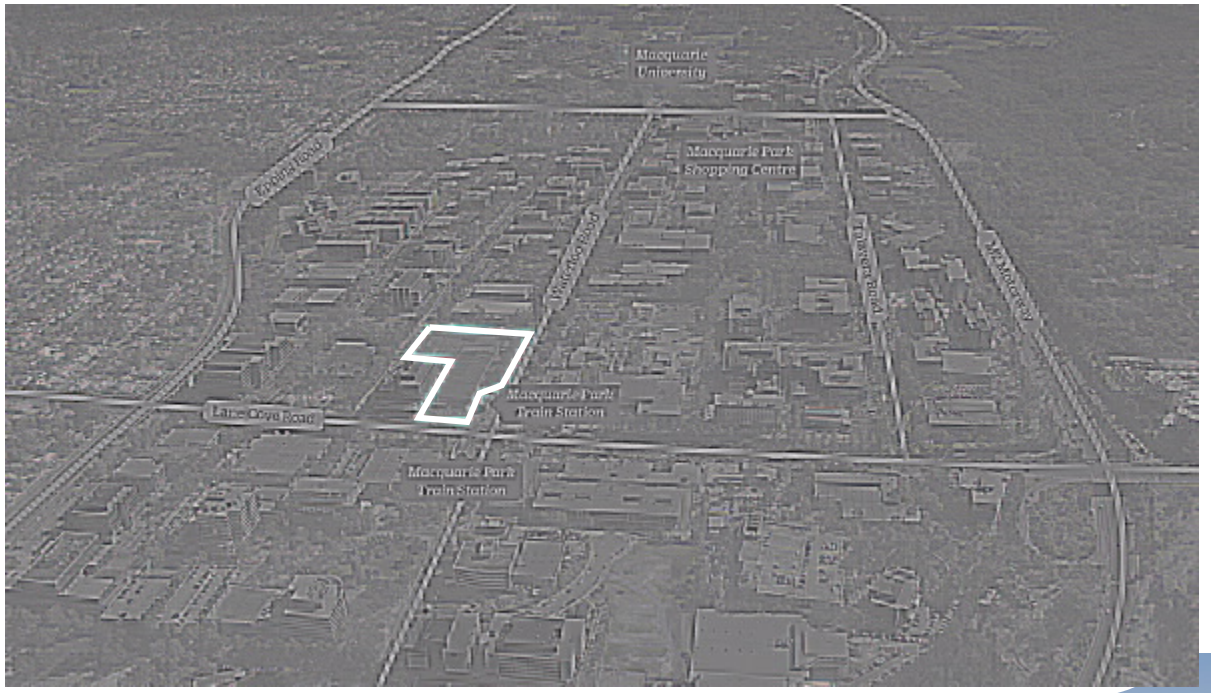
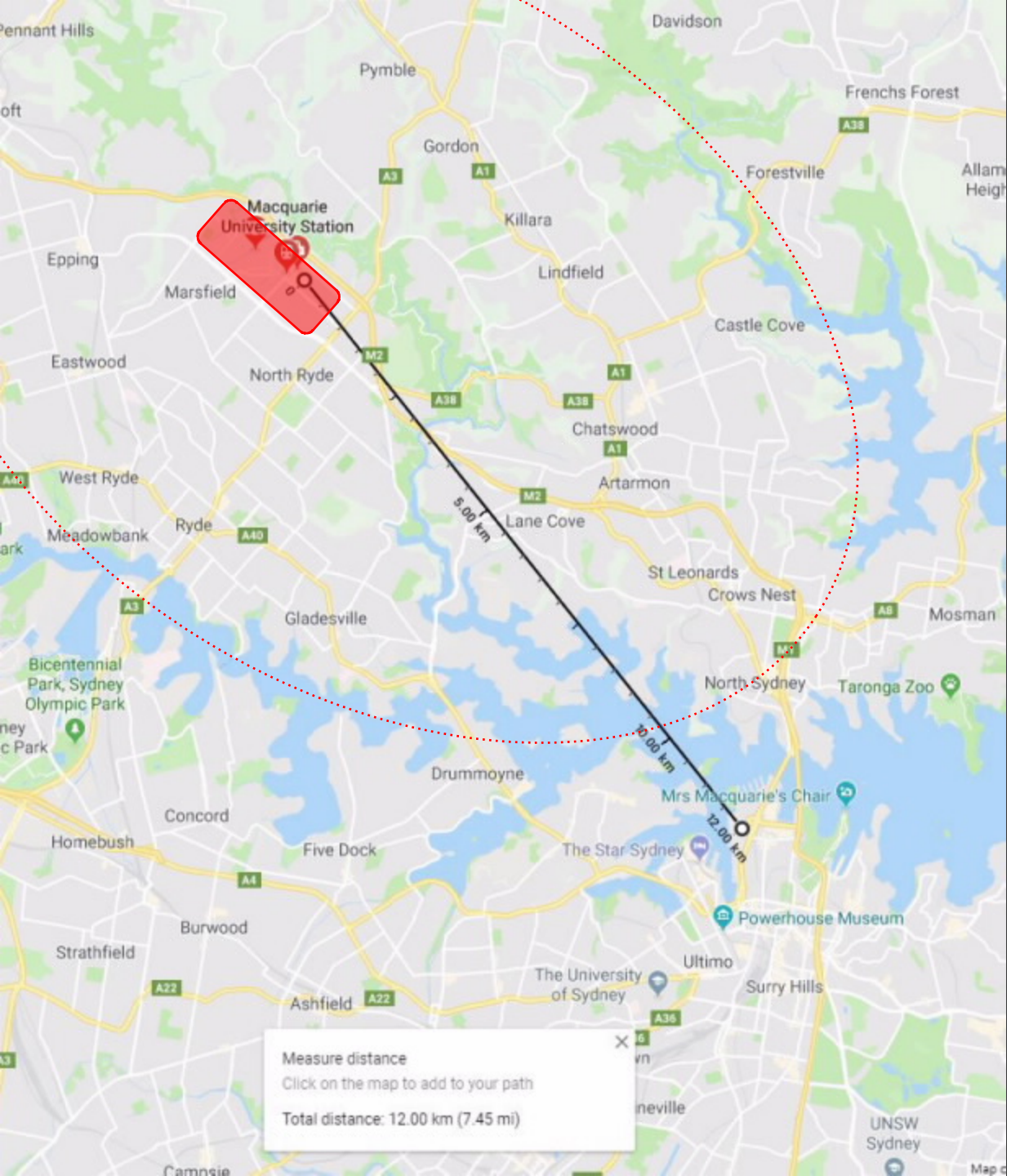
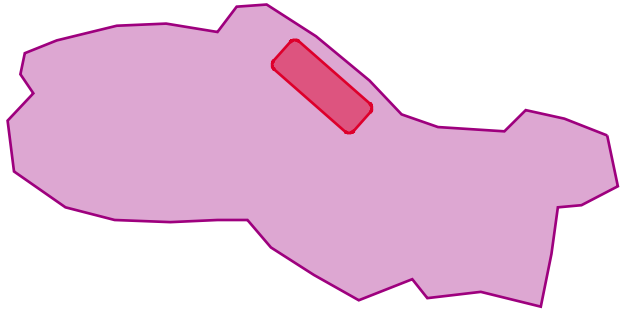
Macquarie Park On-Demand Trial Case Study

Macquarie Park Case Study: Context





Macquarie Park Case Study: Context



Sydney Metropolitan Bus Service Contracts
On-time running results

Financial Year: (All) | Month Selection: (Multiple values) | Contract: (All) | Operator Name: (All)

95% KPI Measurement
Above KPI Measurement
Below KPI Measurement

Contract	Operator Name	Oct 16	Nov 16	Dec 16	Feb 17	Mar 17	Apr 17	May 17	Jun 17	Jul 17	Aug 17	Sep 17	Oct 17	Nov 17	Dec 17	Jan 18
SMBSC 01	Busways Blacktown Pty Ltd	98.3%	98.9%	98.5%	95.7%	96.3%	98.0%	96.5%	96.1%	98.2%	97.4%	97.5%	97.2%	96.4%	97.2%	97.6%
SMBSC 02	Ingleburn Bus Services Pty Ltd (Interline buses)	99.1%	98.8%	100.0%	96.2%	95.4%	99.1%	97.4%	97.7%	96.2%	96.6%	93.1%	97.1%	95.4%	90.3%	97.1%
SMBSC 03	Transit (NSW) Liverpool Pty Ltd	98.4%	99.2%	98.9%	95.9%	95.4%	98.4%	97.0%	98.3%	98.4%	99.5%	98.6%	98.7%	97.8%	95.5%	98.3%
SMBSC 04	Hillsbus Co Pty Ltd (CDC)	96.6%	97.3%	97.2%	94.4%	95.0%	92.6%	92.6%	95.3%	96.3%	95.3%	96.5%	95.4%	94.7%	95.9%	97.4%
SMBSC 05	Punchbowl Bus Co Pty Ltd	99.2%	97.2%	100.0%	96.7%	93.9%	95.5%	93.1%	98.8%	99.6%	96.7%	98.0%	95.9%	95.5%	99.1%	99.0%
SMBSC 06	State Transit Authority of NSW (Sydney Buses)	92.3%	91.2%	97.4%	87.1%	87.4%	88.7%	89.0%	90.2%	96.6%	91.3%	87.3%	90.9%	89.7%	89.3%	96.3%
SMBSC 07	State Transit Authority of NSW (Sydney Buses)	96.1%	94.7%	97.9%	92.0%	91.3%	94.3%	88.9%	94.7%	89.7%	94.2%	91.9%	90.4%	90.9%	91.3%	95.9%
SMBSC 08	State Transit Authority of NSW (Sydney Buses)	97.6%	90.5%	99.2%	86.1%	94.5%	92.5%	94.7%	96.2%	95.7%	93.6%	94.6%	92.7%	91.4%	93.2%	96.7%
SMBSC 09	State Transit Authority of NSW (Sydney Buses)	93.9%	89.8%	97.9%	84.3%	84.6%	84.6%	85.1%	86.6%	92.4%	86.8%	87.1%	88.8%	83.3%	89.4%	96.3%
SMBSC 10	Transev NSW South Pty Ltd	97.0%	96.5%	97.6%	94.8%	94.8%	92.9%	96.8%	96.8%	95.2%	97.2%	93.7%	90.5%	95.2%	96.0%	98.1%
SMBSC 12	Transdev NSW Pty Ltd	96.8%	95.7%	99.2%	90.3%	96.8%	96.2%	96.8%	96.2%	98.9%	97.8%	98.9%	96.8%	96.7%	96.8%	97.0%
SMBSC 13	Transdev NSW South Pty Ltd	96.6%	96.6%	98.4%	95.2%	95.7%	97.5%	96.8%	97.5%	97.1%	96.8%	96.6%	97.5%	97.0%	98.4%	97.7%
SMBSC 14	Forest Coach Lines Pty Ltd	89.7%	90.3%	97.8%	93.0%	92.4%	88.1%	93.5%	95.1%	98.4%	99.5%	98.9%	96.2%	91.9%	95.1%	97.8%
SMBSC 15	Nevilles Bus Service Pty Limited (Busabout)	92.0%	94.1%	99.5%	85.6%	82.7%	90.4%	88.5%	86.6%	98.7%	93.6%	96.5%	92.8%	97.3%	96.3%	98.1%

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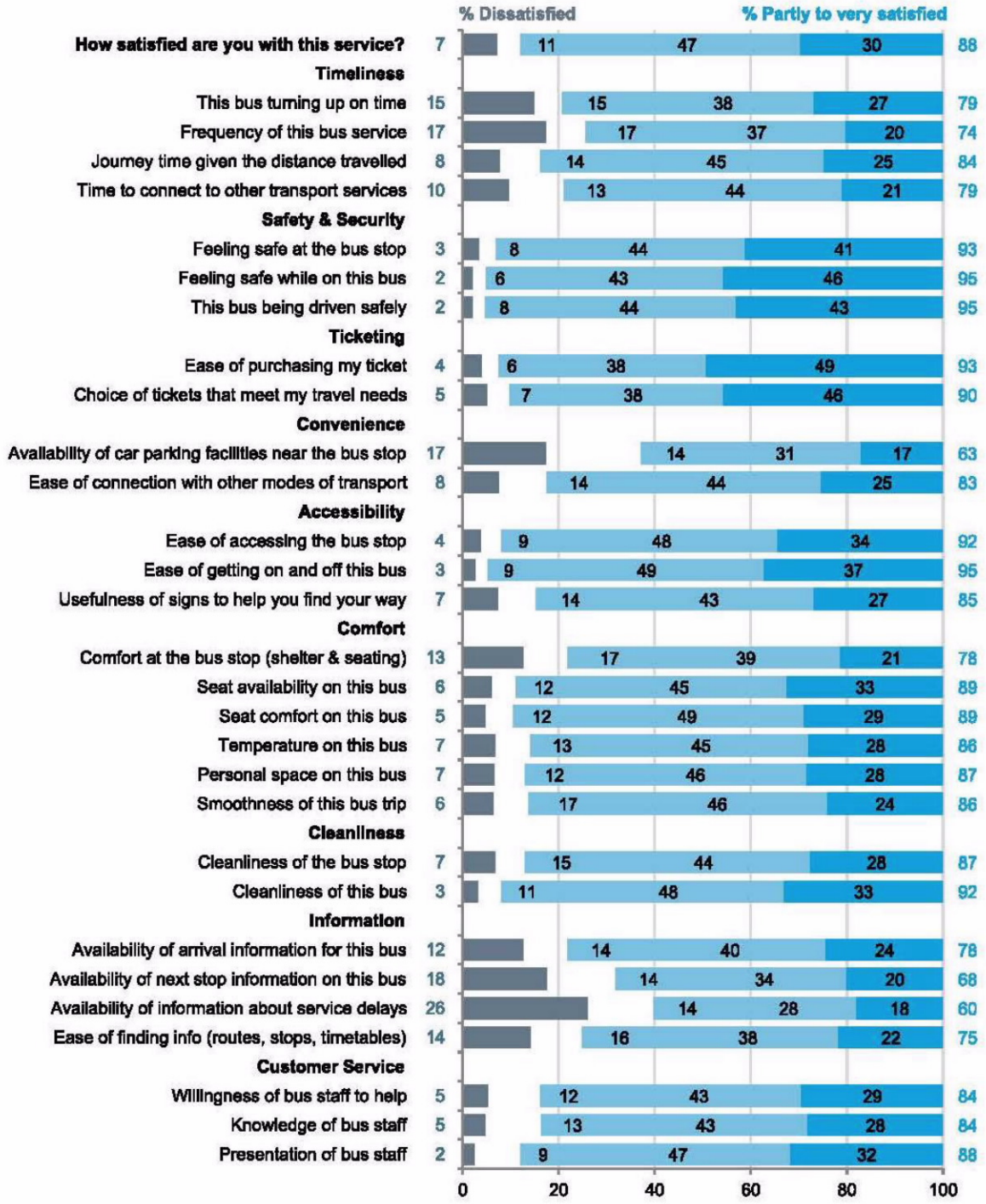

Bus Service – Customer Satisfaction Index

Customers were least satisfied with:

- Timeliness
- Information

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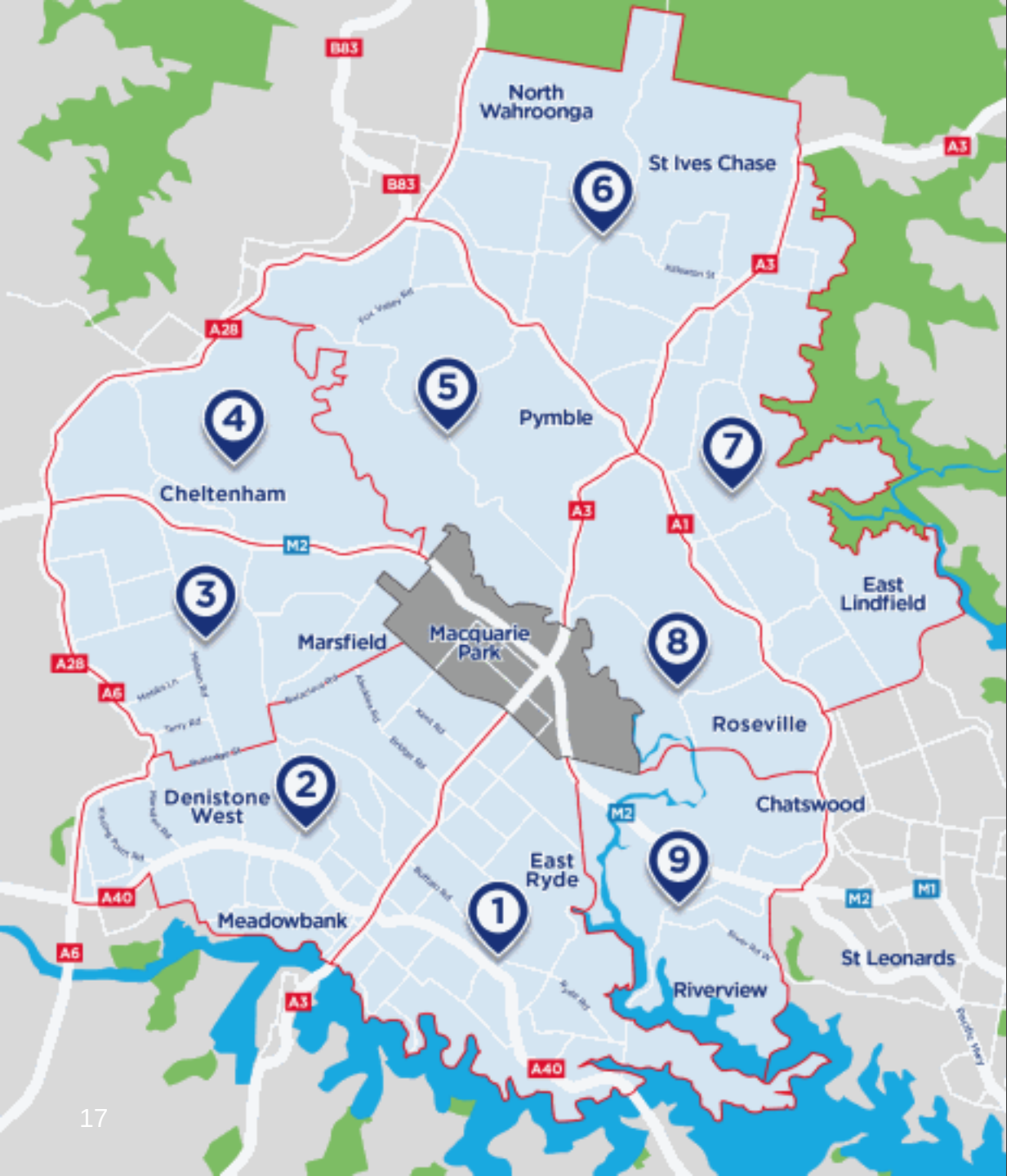
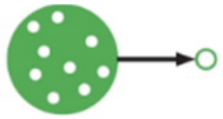
Macquarie Park Case Study: Concept of Operations



AM Peak
CONVERGENCE

On-demand departures from multiple virtual stops in a defined area, destination at POI

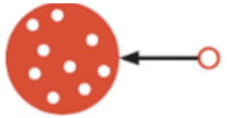


Where? To connect low frequency of transport area to POI and mass transit service

How? The service collects customers at virtual stops in an area, to connect them directly to POI

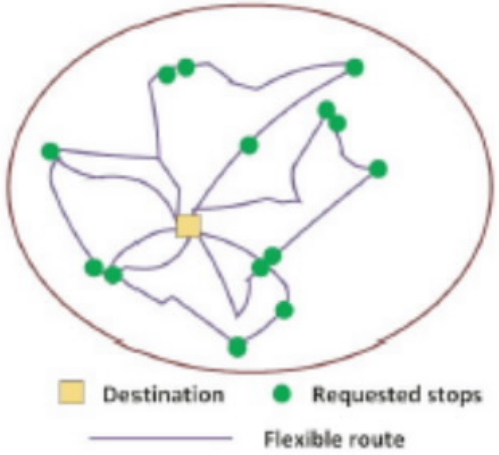
PM Peak
DIVERGENCE

Departures from POI, destination to on-demand virtual stops in a defined area



Where? To connect POI and mass transit service to low frequency of transport area

How? The service connects people on demand from POI to virtual stops in the defined area



https://www.keoride.com.au/

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The Benefits of On-Demand Public Transport

- **Efficiency** – efficiency in service delivery and customer experience.
- **Leveraging Technology** – to meet the Mobility demands of modern society
- **Benefits for Customers** - through convenience, mobility and accessibility:
  - ‘Door-to-door’ service to complement mass transit modes
  - Service availability at desired time of travel
  - A price point which is relative to existing public transport modes
  - Increase confidence in service reliability for the travelling public
- **Government and Operators** – Efficiencies:
  - Optimised government and tax payer investment in public transport
  - Lower rates of subsidy through optimised fleet efficiency, reduced running costs
  - Potential to reduce SOV trips, traffic congestion and pollution
  - Prioritisation of services to customers

Lessons Learnt

Lessons learnt

- Adaptability and Service Improvement
- Procurement Models and Regulation
- Get the technology solution right
- Optimise public investment & support the future role of transit
- Learning, Reporting and Improving Services
- The Public are interested
- Scalability


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