



future  
transport

technology  
inspiring innovation

# On Demand Transport Expression of Innovation



# Opening address

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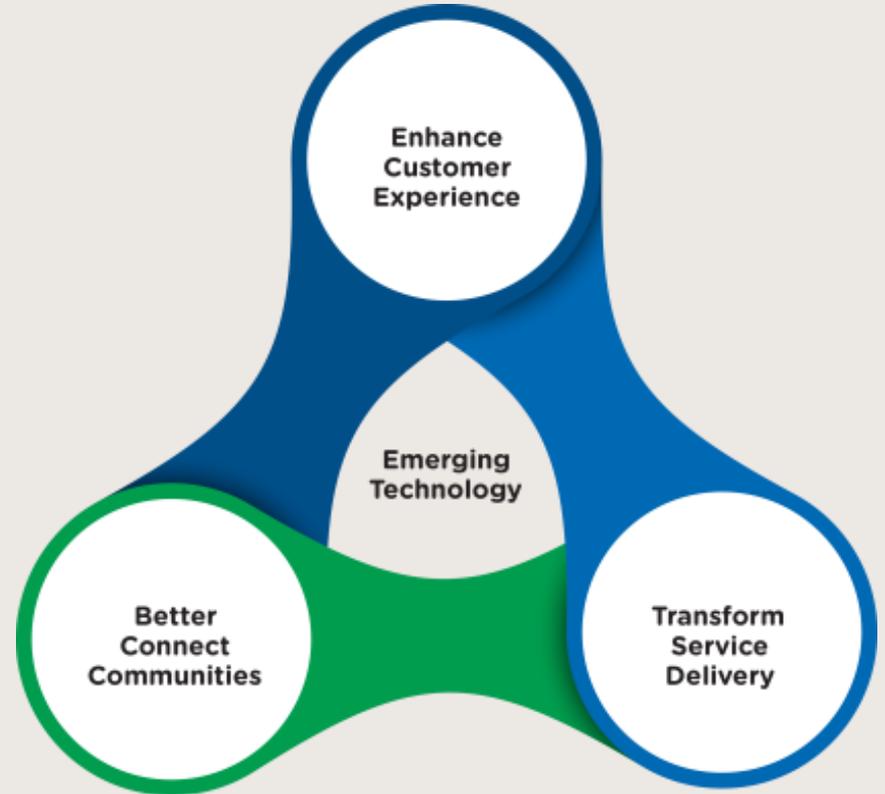
**Tony Braxton-Smith**  
**Deputy Secretary**  
**Customer Services Division**  
**Transport for NSW**

# Our opportunity

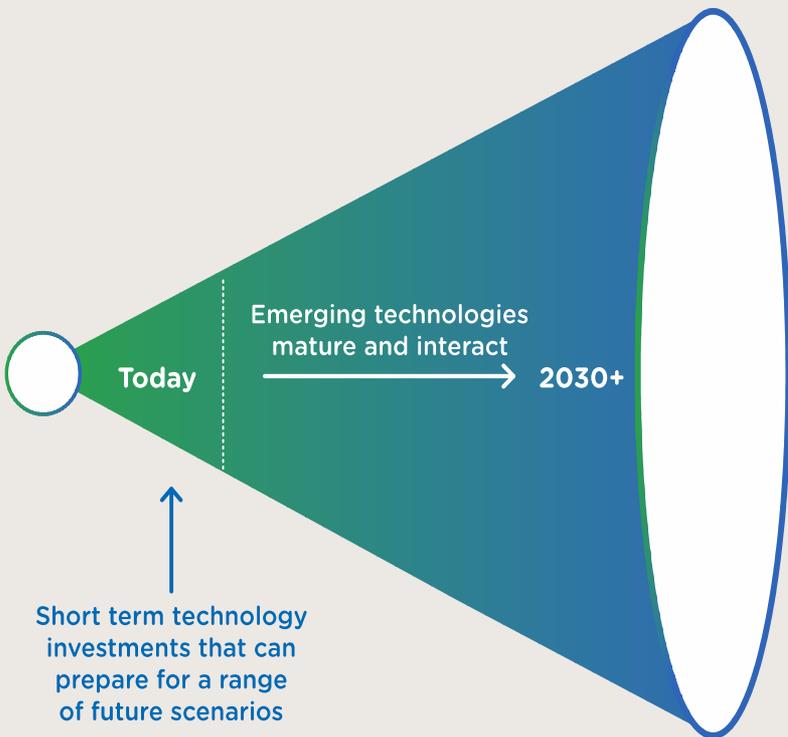


## The Vision

NSW at the forefront of applying new and emerging technologies to deliver better transport and customer outcomes



# We see 12 technologies driving four possible future transport scenarios



## My (autonomous) car is (still) king

Individual point to point trips in personally owned units



## We're all in this together

Aggregated demand, shared-use and network optimisation



## Super-commuting with public, active and shared transport

A lifestyle based on mass transit, flexible and active transport



## Why travel so much?

Technology reduces demand for mobility

# These future scenarios point to 5 future transport strategies enabled by technology



My (autonomous) car is (still) king



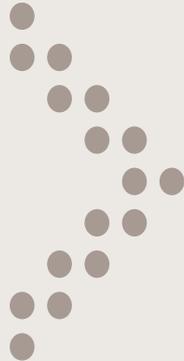
We're all in this together



Super-commuting with public, active and shared transport



Why travel so much?



## Personalise customer interaction:

Develop digital platforms that provide rich, contextual information, frictionless payment, easy navigation and two-way engagement to customise transport experiences



## Transform the mass transit network:

Apply technologies to automate mass transit solutions, improve their efficiency, deliver better service frequency and reduce transit times



## Foster shared, demand-responsive services:

Develop flexible and shared-use transport service models based on aggregated demand to meet market needs and extend transport access



## Enable connected, automated vehicle platforms:

Support adoption of vehicles and infrastructure that deploy automation to efficiently, reliably and safely move people, goods and services



## Create intelligent transport networks, managed with data:

Install technologies and build networks that actively gather data. Use AI and real-time analytics to manage demand, optimise capacity, improve flows and enable better customer outcomes.

# To deliver, we need to change how we engage



**Collaborate with  
industry and  
other experts**

**Co-develop new  
technology  
solutions**

**Procurement as an  
enabler for  
innovation**

**Build flexibility  
into planning and  
delivery  
approaches**

**Government as  
enabler, incubator  
and collaborator**

**Create a flexible,  
responsive and  
agile regulatory  
framework**

# Our next steps 'no regrets' initiatives



**Personalise customer interaction**



**Transform the mass transit network**



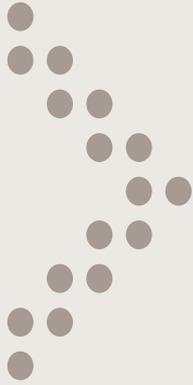
**Foster shared, demand-responsive services**



**Enable connected, automated vehicle platforms**



**Create intelligent transport networks, managed with data**



**Integrate and transform digital channels for tailored, two-way interactions**

**Extend Opal functionality to create a state-wide mobility payment platform**

**Develop a single integrated account for mobility services**

**Automate networks and optimise timetable planning, service delivery and performance**

**Use analytics to optimise end-to-end customer journeys, routes and interchange**

**Create the blueprint for highly automated and fully digitised mass-transit networks**

**Trial on-demand transport services**

**Pilot a customised service model for regional centres that includes on-demand services**

**Incubate new ventures that encourage shared mobility services**

**Activate the Smart Innovation Centre for advanced transport technology**

**Foster development of the regulatory environment to support automated vehicles**

**Develop a Blueprint and operating model for automated vehicles on network**

**Set up a Transport Data Science Incubator and expand Open Data**

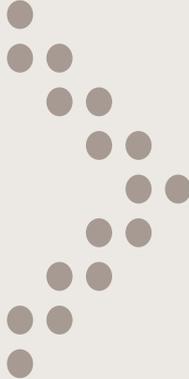
**Trial AI applications that improve network management and/or customer service**

**Integrate predictive analytics into network asset management and maintenance**

# Our next steps 'no regrets' initiatives



-  Personalise customer interaction
-  Transform the mass transit network
-  Foster shared, demand-responsive services
-  Enable connected, automated vehicle platforms
-  Create intelligent transport networks, managed with data

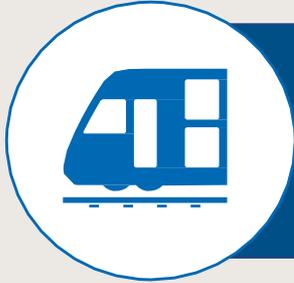


**Trial on-demand transport services**

**Pilot a customised service model for regional centres that includes on-demand services**

**Incubate new ventures that encourage shared mobility services**

# Why focus on flexible transport?



- Major investments in core mass transit network
- 1,000+ bus routes in GSMA providing services



- First/last mile services to or from mass transport hubs
- Poorly patronised routes
- Local trips currently not well serviced
- Regions/routes with sub-optimal service

# Key considerations



**Customer outcomes**

**Public transport network outcomes**

**Delivery approach**

**Value outcomes**

**Potential to scale**

# The RFEOI process

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**Peter Andrews**  
**Project Director**  
**Transport for NSW**

# Strategic context

Acceleration in new transport technologies, and emergence of new transport business models makes it appear increasingly likely that future mobility contracts could look quite different to current contracts.



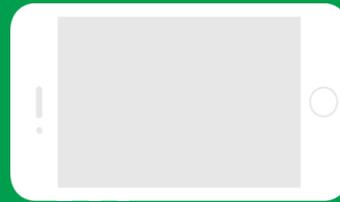
**Pedestrian/cyclists**



**Wayfinding**



**Local transit**



**Mobile applications**



**Taxis/ride share**

# Innovation Objectives

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The specific objectives of the pilots for TfNSW include:

1

Understand scope and ability of new transport models to deliver improved customer outcomes

2

Improve TfNSW's capability and readiness to incorporate future mobility contracts in future tenders

3

Understand customer responses to particular models

4

Understand maturity and feasibility of relevant mobility technologies

5

Increase public confidence and industry interest in future transport models

6

Deliver on our commitment to more personalised customer service as announced with in Future Transport Roadmap

# What's in it for participants?

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Market  
entrance

Future  
contracts

Partnering  
with TfNSW

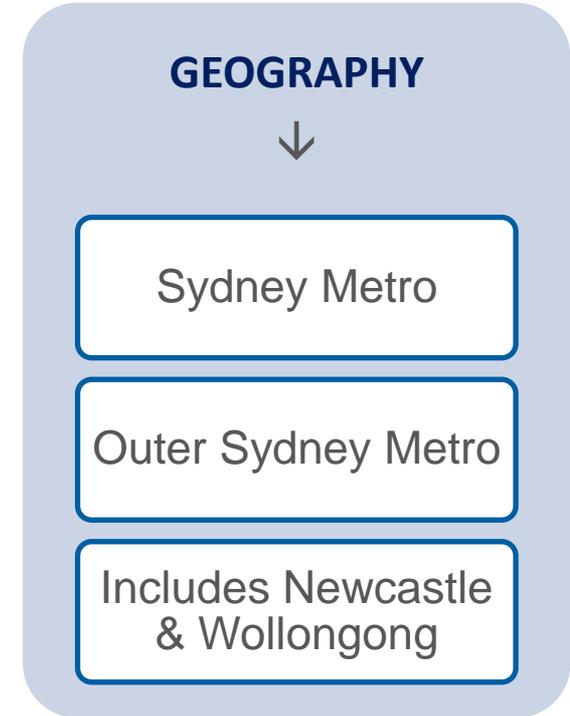
Chance to  
innovate

# Pilot scope



## Services out of scope for pilot:

- Trunk/mass transit trips
- School services
- Community/disability services (eg. TTSS)



# Pilot evaluation criteria

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Alignment with defined scope



Potential applicability across the broader network



Potential of solutions to either improve customer services and grow patronage



Level of innovation proposed in the pilot



Potential speed to market



Availability of the pilot by all potential customers

# Interactive co-design of pilots

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- TfNSW is seeking to collaborate with respondents
- Interactive co-design feedback sessions from mid January 2017
- Confidential sessions
- Not used for evaluation

# Pilot options



Multiple proposals

Innovative service plans

Customer outcomes

# Pilot length

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- Pilot will operate for 6 months with option to extend for up to 3 more 6-month periods
- This will allow us to fully explore promising pilots and make adjustments where required



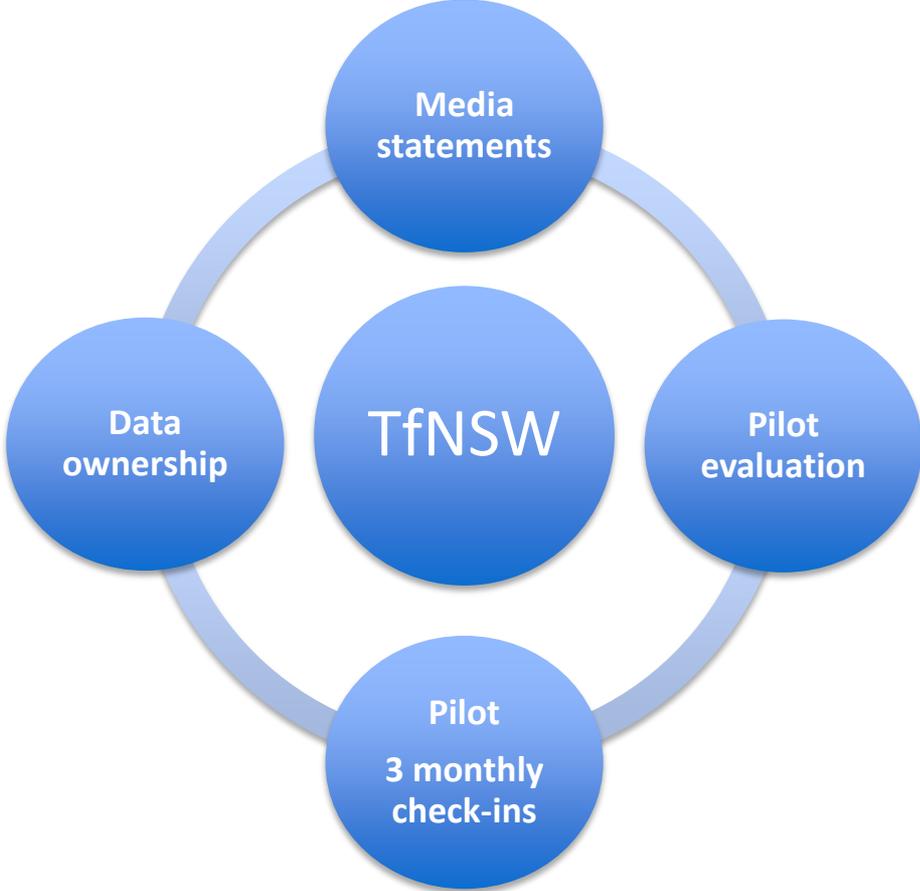
# Pilot operator responsibility

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# TfNSW Responsibility

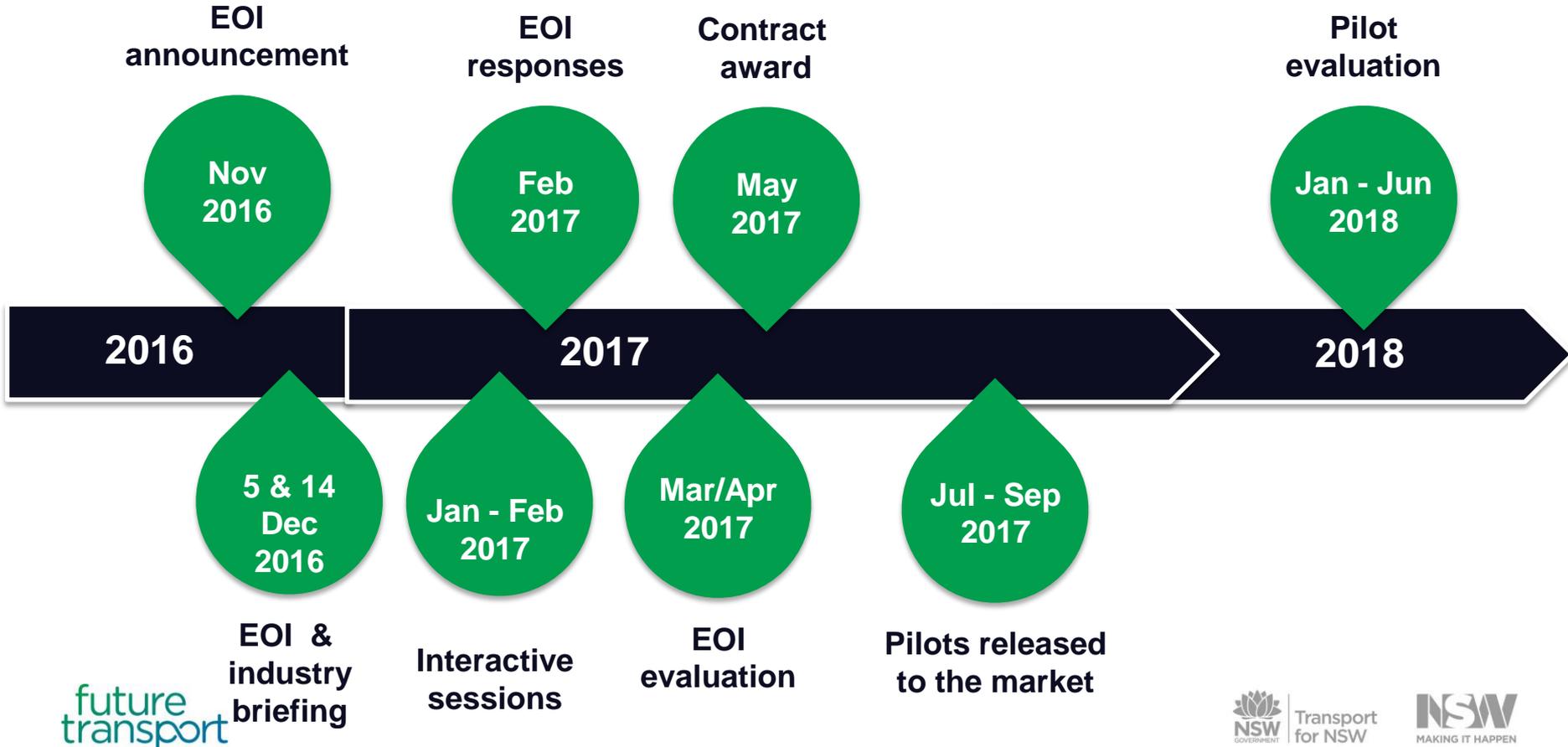
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# Data room

- Confidentiality deed to be submitted to [ondemand.pilot@transport.nsw.gov.au](mailto:ondemand.pilot@transport.nsw.gov.au)
- All Q&As regarding the pilot to be submitted through the data room

# Timing



# Performance measurement

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- Understanding the way each pilot is performing will be critical
- Responses should include how to best monitor and manage performance for each pilot
- It needs to be simple but effective
- We will be interested in
  - Patronage – customer use is the ultimate measure of success of the pilot
  - Impact of successful marketing on patronage
  - Customer perception
  - Service availability and punctuality
  - Service quality
  - Project management and reporting

# Service payment and fares

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- Payment options will be explored for each pilot
- Happy to explore creative payment options, including commercial and semi-commercial ideas
- Passenger payment is not limited to Opal
- Passenger fares should relate to fares that would apply if the pilot was successful and implemented into future transport solutions

# Probity - O'Connor Marsden and Associates

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- Our role is to monitor evaluation process to determine it has been conducted in a fair and equitable manner with due regard to probity
- In accordance with probity principles outlined in the NSW Independent Commission Against Corruption's guidance material, we focus on:
  - Accountability and transparency
  - Impartiality, fairness and honesty
  - Confidentiality
  - Addressing conflicts of interest
  - Value for money

# Next steps & questions?

