



Answers to Questions on Notice – NSW Taxi Council

Mr ABRAHIM: There are a few parts to my response. First, we referred to the on-demand process and the proposal that the NSW Taxi Council developed as part of the on-demand review. We engaged with Cubic Transportation Systems, which runs the Opal system, and established a partnership approach to our proposal. There is a lot in that proposal that we would be happy to share, including what we submitted to Transport for NSW, and how it will work. We would be happy to provide that proposal to the Committee.

The CHAIR: The Committee would like to receive it.

Please refer to the attached On-Demand EOI proposal from the NSW Taxi Council to TfNSW.

Mr GREG WARREN: Do you have cost-comparison data to demonstrate a successful and valid integrated approach that would be cost effective?

Mr ABRAHIM: I do not have that information with me today. However, we have undertaken similar exercises in the past. There are a few examples in our submission that talk to work done by the New South Wales taxi industry with local government and the State Government. There is the Campbelltown to Ambarvale taxi and bus service trial and the Willoughby taxi trial.

Mr GREG WARREN: Can you take that question on notice and respond at a later time?

Mr ROGERS: Yes

Mr ABRAHIM : The NSW Taxi Council was not involved in trials conducted by the Brisbane City Council on the Gold Coast, but they are good examples. I believe services were provided primarily to disadvantaged passengers or those to who required assistance. Passengers were charged between \$1 and \$3 to travel one way to their local shopping centre, community centre and so on. There was a degree of subsidy involved in that process. Again, we are happy to talk further with our Queensland counterparts on the nature of that trial, how that worked and so forth.

In response to the above 2 points, please refer to the attached email correspondence provided by the CEO of the Queensland Taxi Council. He has included 2 attachments to his email providing additional information on the trial.

Unfortunately we do not have access to other trials conducted in Sydney due to the period of when these trials were conducted during the late 80's and early 90's.

NSW Taxi Industry

On Demand Transport EOI Proposal
27 February 2017



NSW TAXIS – ON DEMAND TRANSPORT SERVICES FOR OUR COMMUNITY



Our Offer



- ▶ Taxi's are an experienced on demand service
 - Highly efficient
 - Demand responsive
 - Integrated with other services
- ▶ Operate a 24/7, Door to Door and Door through Door services right across Sydney and NSW
 - Professional, trained drivers
 - Fit for purpose vehicles
 - Government checked
- ▶ Highly flexible and can meet individual and group needs
- ▶ Service all members of the community including some of the most disadvantaged
- ▶ High focus on safety
 - Duress alarms
 - Safety cameras
 - GPS tracking fixed to the vehicle
- ▶ Flexible pricing options through account, contract and sub-contract options
 - Cashless, contactless, pre-registered payment systems through a range of providers



Taxi Stats



170 million passenger journeys pa



Over 900 Wheelchair Accessible
Taxis in NSW





Taxi Stats



Total Taxi Driver Authorities in NSW
26,747



5,512 Taxi Operators in NSW



100 taxi networks/cooperatives in NSW



7 independent networks in Sydney



What are we proposing for Transport for NSW On-Demand EOI?

Option 1



Expansion of Opal beyond Mass Transport

- ▶ Taxis are a form of public transport that is flexible with users that either "show up" or "book on-demand".
- ▶ In this case APIs would be provided that would allow the following:
 - Read or validate an Opal card
 - Deduct value in Real time from an Opal card
- ▶ For these examples, the pattern is:
 - The user hails the on demand transit operator, but doesn't have to register.
 - The user pays for the trip by tapping their Opal card on the transit operator's equipment, which deducts value.
 - Sydney ETS sends the value of trips to the transit operator's bank account.

Customer process from start of journey to end

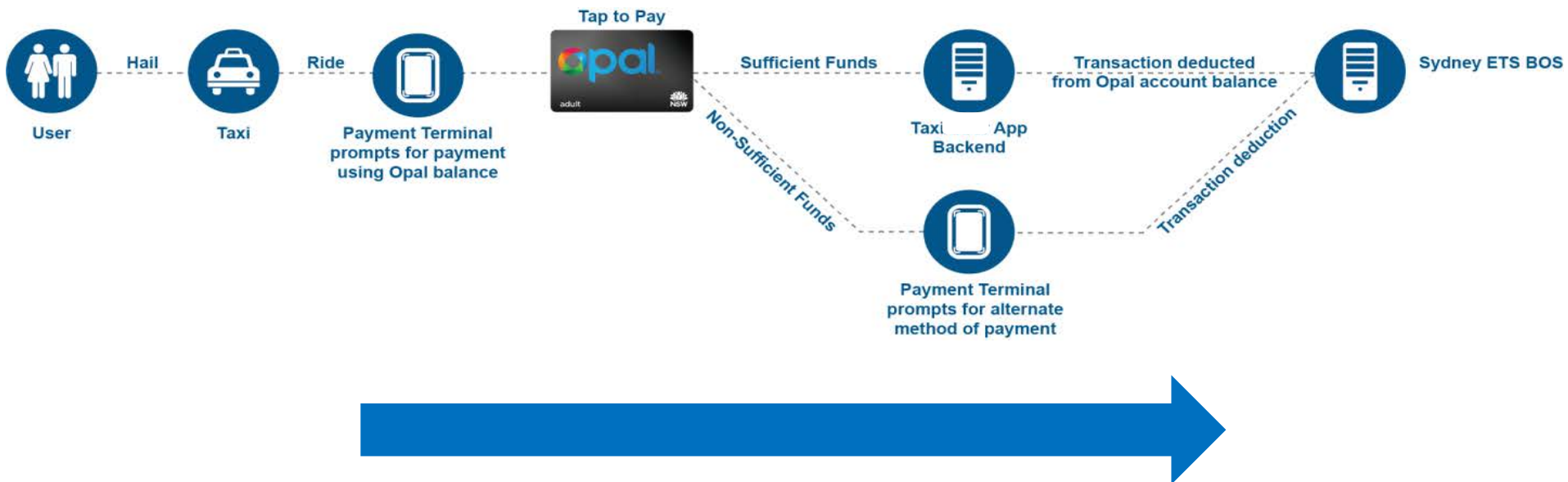


Figure 1: Opal used to pay for taxi trips

How will the Opal function in a taxi?

- ▶ Taxis are already an "on demand" transport provider. If these trips were constrained to go to or from public transport trunks, they would then be a good form of on demand transport. Allowing Opal payment would enable a frictionless end to end journey.

- ▶ For taxis, the steps would be:
 - The transport customer takes a trip, and the taxi driver engages the meter
 - The trip completes. Instead of offering their bankcard, the transport customer hands the driver their Opal card
 - The taxi payment terminal reads the Opal card, requesting a card summary
 - If the card has sufficient balance, the terminal uses an API call to take balance from the Opal card
 - If the card doesn't have sufficient balance, the terminal uses an API to get payment from the customer's associated linked Opal payment method
 - If there is no associated Opal payment account, the payment terminal will request another way to pay (bankcard or cash)
 - If the transport customer paid via Opal, the Sydney ETS backend will transfer money to the taxi company
 - At the end of the month, the taxi company and Sydney ETS can financially reconcile for any exceptions

What are the enablers for Set Up and Reporting?



Third Party setup and reporting

- ▶ For all new third parties, the following would have to be set up:
 - Third parties would have to be set up to authenticate with Sydney ETS
 - The system would be set up to summarize transport value at the end of the day, and apportion the monies to the right operator
 - New extracts or reports would be automatically produced, to facilitate reconciliation

Setup

- ▶ Third parties would be set up to authenticate their backend with Cubic's secure SOA gateway. This would allow them to call APIs; unknown third parties would be rejected.

Financial apportionment

- ▶ Sydney ETS will receive transactions on the new modes. These will go to the Sydney
- ▶ ETS Core Central System (CCS), and then on to the Revenue Settlement System (RSS).
- ▶ RSS will be set up with rules to apportion monies from use transactions from the new operators to new operator accounts, once per day.

Financial reconciliation

- ▶ For any system of systems that operates in volume, there are always discrepancies between systems. These are usually reconciled between accounting organizations.
- ▶ Sydney ETS will be set up with data feeds or extracts for transactions. These will be sent to Sydney ETS finance and the new operators, so reconciliation can take place.

On Demand Trip Verification

- ▶ Many 3rd party transport providers will use Opal facilities to have transit customers pay for their travel. In most cases, the cost to provide the government sanctioned services will exceed the cost of providing travel.
- ▶ These service providers will ask the government for the difference. In return, the providers will agree to abide by certain rules
- ▶ On demand trips will be at locations greater than 800m from mass transit trunks
- ▶ On demand trips during peak hours will originate or terminate at mass transit trunks
- ▶ Sydney ETS will be set up to send TfNSW data extracts of all "on demand" trips. This will allow TfNSW to ensure that the On Demand operators are meeting the commitments in their On Demand service contract.

What are the Next Steps?

- ▶ **Business rules need to be defined and agreed to with Transport for NSW.**

These need to include;

- Schedule of rates for passengers
- Trip subsidy to offset gap between customer and driver
- Establish policy for no-shows and multi hire arrangements.

- ▶ **Geographic territory for the pilot**

- Premier Cabs

- ▶ **Integration with systems in vehicle**

- ▶ **Extending (not replacing) existing services**

Option 2



MoTi Transit Application



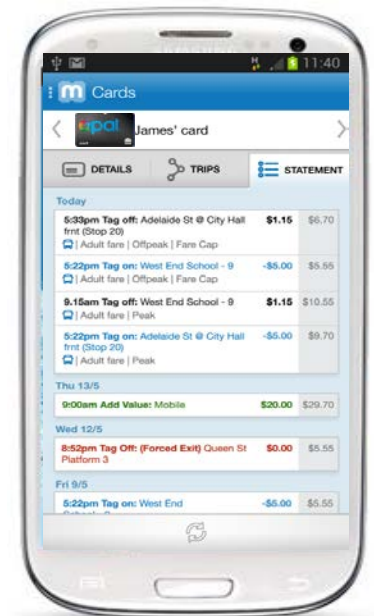
Deliver a seamless extension and enhancement to public transport services through:

- ▶ **Integrated Fare Payment**
- ▶ **Integrated Journey Planning**
- ▶ **Customer Engagement**



Integrated Fare Payment...

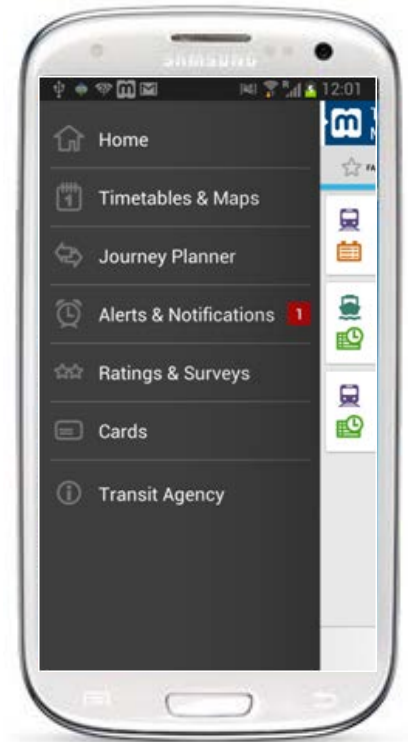
- ▶ Create Moti account
- ▶ Tap & Register Opal Card
- ▶ View Moti transaction history
- ▶ Pay Opal fares for on-demand services
- ▶ Adjustments for daily & weekly caps
- ▶ View Moti transaction history
- ▶ Card wallet
- ▶ Card balance
- ▶ NFC Support





Integrated Journey Planning...

- Select end to end option
- Book on-demand taxi service
- Taxi Vehicle tracker
- Real time arrivals
- Ride rating and surveys





Scenario of On-Demand Taxi Service...



Bus Replacement Plan

- Max passenger loading less than 8 pax (over a month or more)
- Taxi costs equates to less than Bus costs
- Scope of journey is first or last segments only
- Segment spans consecutive stops



Transit Analytics

Replacement Trip Sample A*

CONTRACT	SERVICE	SCHED START	TRIP DISTANCE	MAX PASSENGER LOAD	FIRST BOARDING STOP	LAST ALIGHTING STOP	PASSENGER KM	MAXX PASSENGER LOAD	BUS TRIPS	TAXI TRIPS	BUS COSTS	TAXI COSTS
Data obfuscated		01/09/2016 11:21:00 PM	10.217	0	0	0	0.000	4	1	0	\$ 51.09	\$ -
		02/09/2016 11:21:00 PM	10.217	1	21	26	2.984	4	1	1	\$ 51.09	\$ 15.45
		05/09/2016 11:21:00 PM	10.217	1	21	26	2.984	4	1	1	\$ 51.09	\$ 13.95
		06/09/2016 11:21:00 PM	10.217	3	12	26	6.616	4	1	1	\$ 51.09	\$ 23.50
		07/09/2016 11:21:00 PM	10.217	2	1	26	10.217	4	1	1	\$ 51.09	\$ 32.97
		08/09/2016 11:21:00 PM	10.217	2	21	26	2.984	4	1	1	\$ 51.09	\$ 13.95
		09/09/2016 11:21:00 PM	10.217	4	1	26	10.217	4	1	1	\$ 51.09	\$ 34.47
		12/09/2016 11:21:00 PM	10.217	0	0	0	0.000	4	1	0	\$ 51.09	\$ -
		13/09/2016 11:21:00 PM	10.217	1	21	26	2.984	4	1	1	\$ 51.09	\$ 13.95
		14/09/2016 11:21:00 PM	10.217	3	9	26	7.406	4	1	1	\$ 51.09	\$ 25.58
		15/09/2016 11:21:00 PM	10.217	1	21	26	2.984	4	1	1	\$ 51.09	\$ 13.95
		16/09/2016 11:21:00 PM	10.217	2	1	26	10.217	4	1	1	\$ 51.09	\$ 34.47
		19/09/2016 11:21:00 PM	10.217	0	0	0	0.000	4	1	0	\$ 51.09	\$ -
		20/09/2016 11:21:00 PM	10.217	2	23	26	1.890	4	1	1	\$ 51.09	\$ 11.07
		21/09/2016 11:21:00 PM	10.217	0	0	0	0.000	4	1	0	\$ 51.09	\$ -
		22/09/2016 11:21:00 PM	10.217	1	24	26	1.239	4	1	1	\$ 51.09	\$ 9.36
		23/09/2016 11:21:00 PM	10.217	1	15	26	5.608	4	1	1	\$ 51.09	\$ 22.35
		26/09/2016 11:21:00 PM	10.217	1	24	26	1.239	4	1	1	\$ 51.09	\$ 9.36
		27/09/2016 11:21:00 PM	10.217	0	0	0	0.000	4	1	0	\$ 51.09	\$ -
		28/09/2016 11:21:00 PM	10.217	0	0	0	0.000	4	1	0	\$ 51.09	\$ -
		29/09/2016 11:21:00 PM	10.217	2	1	26	10.217	4	1	1	\$ 51.09	\$ 32.97
		30/09/2016 11:21:00 PM	10.217	1	15	26	5.608	4	1	1	\$ 51.09	\$ 22.35
Totals			224.774				85.394		22	16	\$ 1,123.87	\$ 329.69

MONTH	BUS TRIP DISTANCE	TAXI TRIP DISTANCE	BUS TRIPS	TAXI TRIPS	BUS COSTS	TAXI COSTS	TOTAL SAVINGS
September 2016	2,017,142	1,220,873	151,870	115,803	\$ 10,085,708	\$ 4,109,668	\$ 5,976,040

*source: netBi analytics 2016

- Sample taken over 1 month period
- Total bus costs \$10.1M
- Total taxi cost \$4.1M
- Total saving of almost \$6M if replaced by a taxi

What are the Next Steps?



- ▶ Business rules need to be defined and agreed to with Transport for NSW. These need to include;
 - Schedule of rates for passengers
 - Trip subsidy to offset gap between customer and driver
 - Establish policy for no-shows and multi hire arrangements.
- ▶ Systems integration with MT Data
- ▶ Geographic territory for the pilot
 - Premier Cabs
- ▶ Extending (not replacing) existing services



Appendix A



- ▶ Please refer to the attached document from MOTI as Appendix A



Thank you for this opportunity to contribute to the
On-Demand Transport Community

Appendices

Flexible On-Demand Service Experience



► Contract Work

- Department of Veteran Affairs
- Assisted School Travel Program
- Community Transport
- Non Emergency Patient Transport
- Corporate accounts



► Contracted services to support Government/Non-Government activities

- NSW Government South Coast Summer Buses
- Key events – ANZAC Day etc



Key Benefits



- ▶ **Cost Effective**
 - Can switch quickly between taxi and contract work
 - Save on high cost/high capital transport services
- ▶ **Collaboration in service planning**
 - Integrated service design and delivery options
 - Coordination with Government agencies
- ▶ **Data capture and performance monitoring**
 - Journey data
 - Distance
 - Locations/postcode
 - Incident/event
 - Tailored reports to support performance measures
- ▶ **Diverse Offering**
 - Premium services
 - Standard taxis
 - Disability services
 - Group booking Taxis



From: [REDACTED]
To: [REDACTED]
Cc: [REDACTED]
Subject: Re: Previous Gold Coast Trial
Date: [REDACTED]

Martin

The Council Cab concept has been around for many years. It started in Brisbane as an initiative of the Brisbane City Council and has since been picked up by other Local Governments, most notably Gold Coast City Council.

Please find attached brochures and links to -

- Brisbane <https://www.brisbane.qld.gov.au/traffic-transport/public-transport/special-taxi-services/council-cabs>
- Gold Coast <http://www.goldcoast.qld.gov.au/thegoldcoast/council-cab-service-954.html>

The Council Cab concept began in Brisbane as way to save BCC costs associated with running low density bus routes, or the flipped view, allowing BCC to extend (or retain) public transport services on non-profitable routes. It was originally pitched by Yellow Cabs Brisbane and they held the contract to provide the service with BCC for many years - I believe that the contract is now with Black & White Cabs.

The concept's benefits include -

- a fixed schedule bus that would run whether there are any passengers is replaced by an on-demand taxi that only runs if there are passengers (service & environmental efficiencies);
- the service operates at marginal costs for the Council or Gov (pax pay the taxi drivers fares equivalent of the respective bus fare, the driver runs the service on-meter, if the fares collected are greater than the metered fare the driver is the beneficiary, if the fares collected are less than the metered fare the driver is compensated for the difference by the Council/Gov via their Network)
- the service allows budget control for the Council/Gov because they can limit both the time the service operates (days available, hours available) and the openness of the eligibility criteria (age, health card, disability etc). nb Limiting the operational times tends to push more pax into each vehicle, increasing the fares collected and reducing the need for top-up funding by Council/Gov.
- pax get a better service because taxi picks them at their door (rather than bus stop) and delivers them on the (return) journey from the shopping centre to their door (i.e. not struggling back from the bus stop with bags of groceries etc).

As a last comment, Council Cab is a mature product and well worth recommending to any Committee with a public transport / social inclusion focus. The concept presents as readily adaptable to "last mile" scenarios with substantial savings to Gov in terms of car parking infrastructure capital costs, improved safety for pax, and improved service to pax (converts mass public transport from node-to-node into a modal hybrid service that is potentially door-to-door).

Regards
Blair Davies
CEO, Australian Taxi Industry Association