



Making it easier for
customers to park and ride

A CASE STUDY

The issue

Accessing car parks to catch public transport has been a pain point for customers who commute. Research shows that in some areas, almost half of Transport for NSW commuter car park users don't go on to use public transport. For instance, they park but then work in the area.

This prevents public transport customers using car spaces that are intended for commuters, with flow on impacts for how people think about and use the public transport network.

Who is the customer?

Customers are those who make use of commuter car parks to access the public transport network, typically as part of their daily commute to and from work.



What the government did

Park&Ride gives free parking at selected commuter car parks to customers who catch public transport, for up to 18 hours each day. Transport introduced the world-first Park&Ride program in the form of a trial in January 2018.

Park&Ride links number plate recognition technology with the customer's Opal card, which allows free parking in boom-gated Park&Ride commuter car parks. The technology identifies if a customer has used public transport when they tap their Opal card to exit the car park and lifts the boom gate with no cost to the customer. Non-public transport users are charged a fee to use the car park. The system is now in place at 10 commuter car parks in NSW, with plans to introduce it at more sites across the state.

Since late 2019, the program has also helped customers plan their trips by using predictive technology to tell customers if there will be car spaces available for when they plan to arrive. Digital signs also display how many spaces are available from outside the car park, saving customers time and effort to find a space.

What was achieved

Since its launch:

-  **more than 90%** of customers using the car parks **take public transport**
-  the system **successfully protects parking spaces** for genuine public transport users
-  passengers **save time and effort** to park and catch public transport
-  **feedback** from customers **is positive**.

1 Prioritise an easy customer experience

Insight

Transport used a human centred design approach, using feedback from observations of, and interviews with customers at car parks to inform the solution's design.

Tip Use customer research to identify their pain points early in the process. This helps produce a more customer-centric offering.

Transport's research involved:

- One-on-one interviews with car park users and shadowing them on their trip between home and the car park
- Interviewing at multiple locations to ensure a diverse range of customers
- Questions aimed to understand the customer journey, including:
 - how they drive to and from the transport hub
 - their routines before travelling their 'first mile and last mile'
 - the decisions they make before and during their trip
 - the reason they use the car park.
- Traffic surveyors to assess the impact on foot and vehicle traffic flow at different times of day.

Feedback from customers helped Transport design a more customer-centric product.

Customer feedback	How it enhanced the solution's design
Customers are often in a hurry to catch public transport, so fast entry was identified as critical.	Fast entry into the car park through number plate recognition cameras, rather than a traditional ticketed boom gate.
Customers, particularly family members, often car share – where one would drive the car in, but another would drive it out.	Customers do not need to tap on to enter, only tap off to exit the car park to validate their use of public transport. Previous iterations required tap on when entering, meaning only the person driving the car in, could drive it out.
Customers often plan their journeys ahead, including deciding whether to drive to a station, or take alternative means, such as walking or cycling.	Transport released occupancy data to the open data hub, enabling predictive technology to inform customers of available car parks, for when they plan to arrive.
Customers did not want local traffic more congested, with slow entry to the car park, especially at peak times.	Prioritised minimising local traffic impacts with fast car park entry. Digital signs outside car parks display how many spaces are available to decrease traffic circling.

Customer feedback helped commuter car parks to offer:

- frictionless entry for customers in a hurry
- car park access for ride-sharers, particularly families
- reduced impact on local traffic flow
- reduced customer effort.

2 Innovate with existing technology



Insight

Tip Using existing technology, rather than building an end-to-end system from scratch, can enable:

- ✓ faster deployment of the system
- ✓ reduced cost to conduct a trial
- ✓ an easily scalable product.

Transport's Research and Development Methodology:

Step 1

Internal study to understand available market technologies:

- Transport's internal research aimed at discovering available solutions, both domestic and international, that integrated parking systems with transport technology.
- The research found no similar system existed.
- This triggered the decision to develop a world-first integrated smart card and car parking management system.

Step 2

Engage external expertise in the areas your internal study identifies:

- Transport engaged a car parking consultant to provide advice.
- The best available technology identified on the market was number plate recognition, with ticketless access, low customer effort and minimal impact to customers.

Step 3

Look at different possible solutions:

- All available car parking management systems were considered as part of a consultancy report.
- Transport's delivery team and the consultant collaborated over multiple workshops to develop the ability to link Opal technology with existing boom gate car park systems.
- Linking these two systems meant a faster, easier and more cost-effective development phase than constructing a whole new system from scratch.

Step 4

Ensure you have the capability to implement a successful solution:

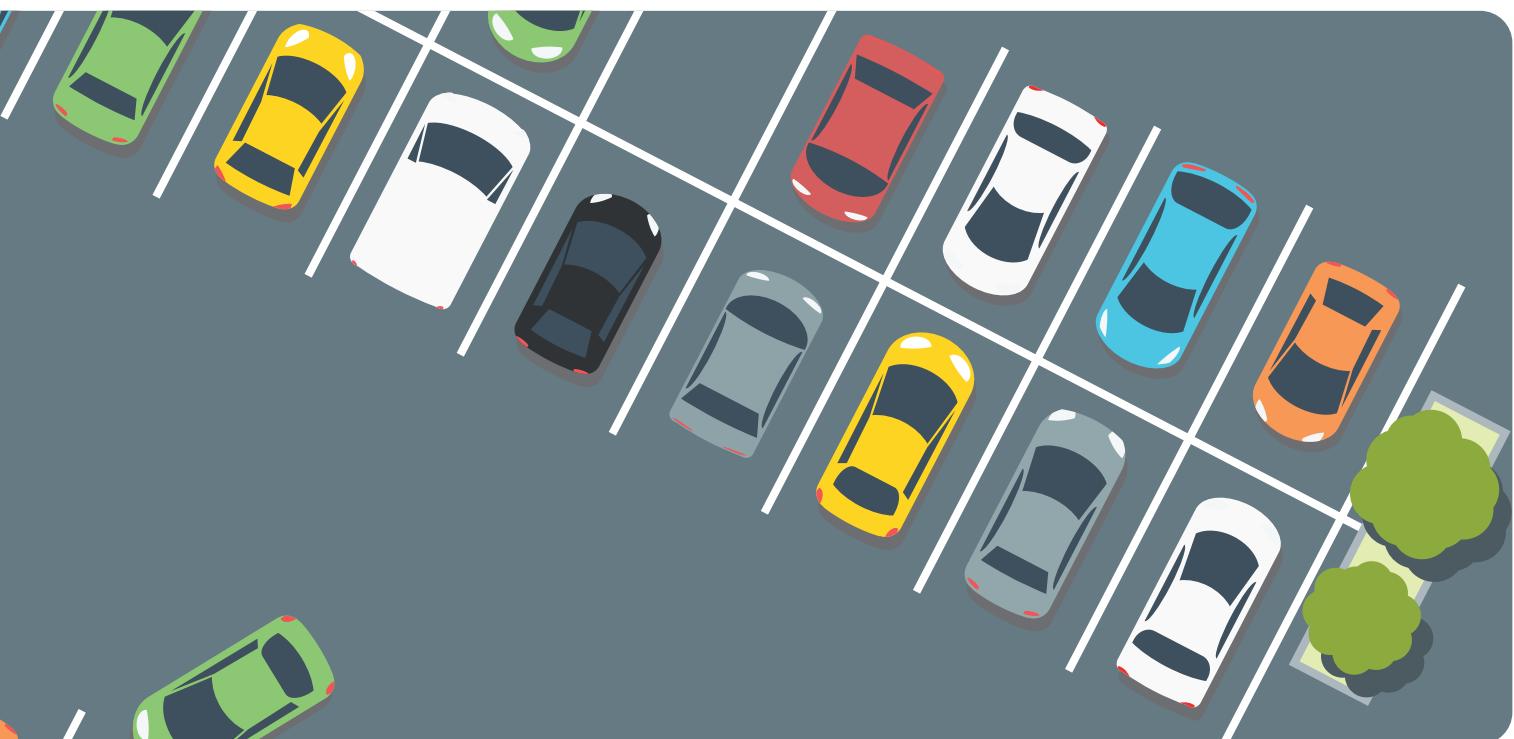
- Engage a product manager with the expertise to develop and roll out your product. Transport hired an expert in the car park industry, combining this experience with their digital team to support and deliver the program.
- On-boarding an experienced manager enabled Transport to procure a suitable vendor to build and operate the car parking system, including providing customer service at the boom gate intercom.

Outsourcing the implementation and management of your product:

 enables your staff to prioritise other work including improvement of the product

 reduces cost and effort of hiring and training new staff

 avoids having to establish entirely new capabilities and response management technologies, systems and workforce at a higher cost and much longer duration to implement.



3 Open Data Sharing creates more opportunities to improve the customer experience

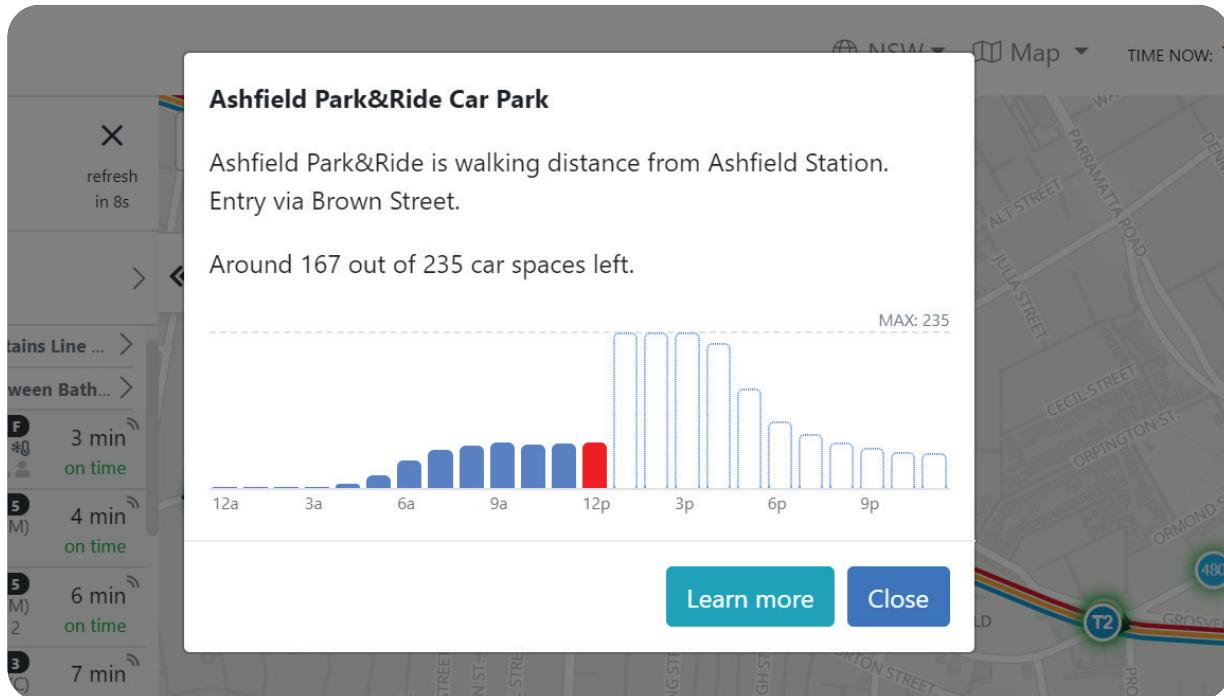


Insight

Tip Sharing existing data sets from your solution creates opportunities for private companies to create new value for customers. Transport makes the data on car park use available to private developers via the [Open Data Hub](#).

Sharing data allows the market to innovate and provide new solutions to enhance the customer experience through apps, such as [anytrip.com.au](#). AnyTrip enables customers to check the current and future availability of car parks at select stations in NSW. This empowers customers to decide whether to drive to the station or take alternative transport.

NSW Government research has told us that services receive **87%** customer satisfaction when effort is low, and **92%** of customers are happy to have their information shared to make services easier (2019 CSMS).



Benefits of an Open Data Hub:



Customers receive products and their benefits faster



Encourages private sector innovation



Low to no cost to government



Advances community engagement with the government



Enables data sharing between government agencies in NSW and across jurisdictions



Facilitates greater understanding of agencies own data and the potential of that data



Supports evidence-based decision-making

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