

# **BusPlus –** Public Transport Innovation

Off-peak public transport is frequently inefficient, poorly utilised and expensive to deliver. NICTA has designed a "hub and shuttle" off-peak public transport option that provides improved service regardless of where you go, is convenient and reduces carbon emissions.



#### **NICTA's Approach**

- A new weekend service
- Establish "hubs" in community / shopping centres
- Buses run frequently between hubs (every 15 minutes)
- Taxis shuttle passengers between their local bus stop and their nearest hub
- Bus and taxi legs all in the one ticket
- Users book via a website, phone or by downloading the app
- Book up to 15 minutes before travel
- Passengers can specify "depart after" or "arrive before" time
- System plans the whole route pickup at your local stop, bus travel, and a taxi waiting at the other end to complete the journey
- Passengers may share taxis up to three passengers per taxi
- Minibuses can also be used as shuttles.

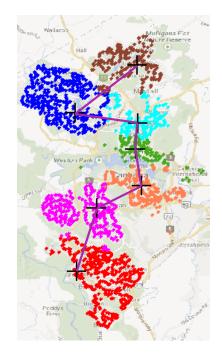
### Impact

- Faster travel times
- Reliable timetables across a broad region
- Social equity: improve access for all citizens to employment, social, cultural, and sporting life of the community
- Hubs concentrate demand, increasing efficiency of buses
- Buses only used where demand is greatest
- Taxi fleet adapts to variable demand
- Reduces CO2 emissions
- Complements light rail.

Right: A map showing a proposed bus route, visiting seven hubs in Canberra: Gungahlin, Belconnen, Dickson, Civic, Kingston, Woden and Tuggeranong. Coloured circles indicate the bus stops associated with each hub.

Industry Engagement Working with the ACT Government

Working with the ACT Government towards a trial in 2015.



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This project is part of NICTA's Infrastructure, Transport and Logistics Business Team, which delivers innovative ICT solutions that transform the efficiency, safety and sustainability of transportation systems and infrastructure networks.

## Research Excellence in ICT

Wealth Creation for Australia



# Leading the Way

NICTA is Australia's Information and Communications Technology (ICT) Research Centre of Excellence, driving innovation through high quality research, research training, commercialisation and contract research.

NICTA has the largest concentration of ICT researchers in Australia. Our research focuses on use-inspired basic research that benefits industry, the community and the national interest.

Since NICTA's inception in 2002, NICTA has built strong research capability in:

- Software Systems
- Networks
- Machine Learning
- Computer Vision
- Optimisation.

Our Business Teams are the market focus of our research capabilities:

- Broadband and the Digital Economy
- Infrastructure, Transport and Logistics
- Security and Environment.

NICTA researchers work on Business Team projects supported by:

- An Engineering and Technology
  Development Team
- IP, Legal and other professional support.

Our work as a world-class research institute and Centre of Excellence in science and innovation brings together many of Australia's and the world's top ICT researchers. NICTA provides them with the facilities and support they require, making imagination to impact a reality.

NICTA's unique approach fosters and develops ICT research. We work closely with both industry and other research institutions to solve problems and make breakthroughs in ICT with real impact. NICTA's focus on use-inspired research means our projects have direct relevance to the challenges faced by business, government and individuals around the world. The result is breakthrough technologies that provide commercial opportunities and have a positive impact on Australia's export earnings.

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