

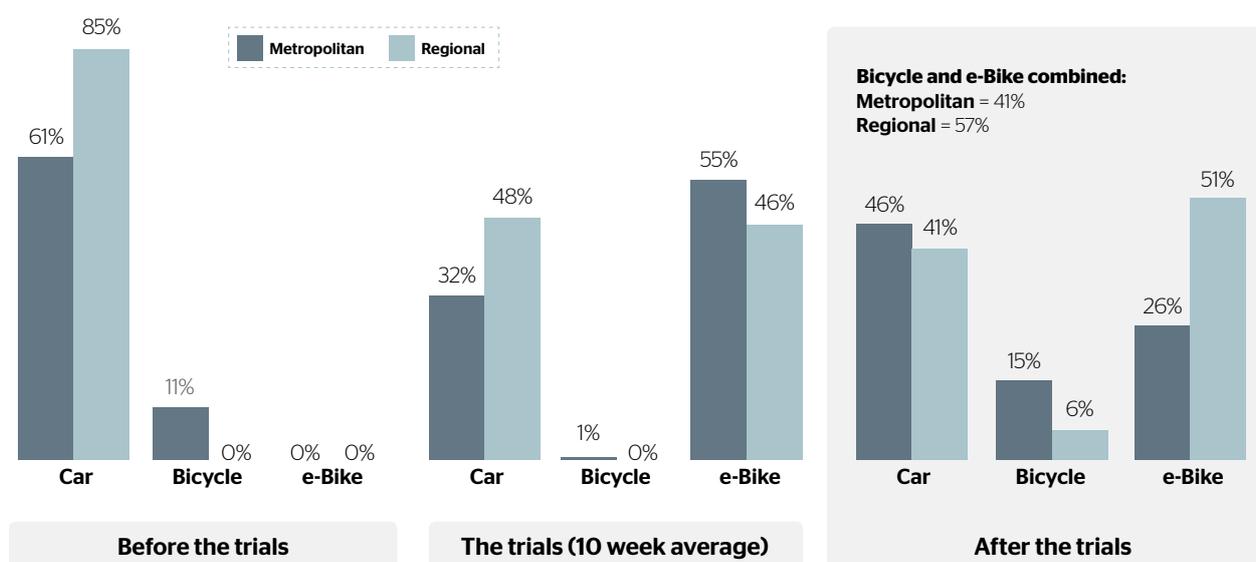
The power of electric bikes

A tale of two cities

RAC's two electric bike (e-Bike) trials have successfully showcased the potential of e-Bikes to overcome some of the actual or perceived barriers to cycling such as distance, time, fitness or health constraints. This is evidenced by the dramatic reduction in car trips and increase in cycling trips for both commuting and non-commuting purposes experienced during both trials, sustained afterwards.

On average, participants in the regional trial had a higher level of e-Bike usage than their metropolitan Perth counterparts, having made two thirds as many e-Bike trips over the 10 weeks (1,166 trips compared to 1,778 trips) despite being half the number of participants. They also used their e-Bikes more for non-commuting trips compared to those in Perth (449 trips compared to 343 trips).

» TRIAL INFORMATION	METROPOLITAN E-BIKE TRIAL ³	REGIONAL E-BIKE TRIAL ⁴
Number of participants	40	20
Number of days with rain¹	17	27
Total rainfall²	89.4mm	75.1mm
» COMMUTING TRIPS DURING THE TRIAL		
Total trips (all modes)	2,522	1,528
e-Bike trips	1,435	717
Average number of e-Bike trips per participant	35 per week	35 per week
Total car (as driver or passenger) trips	806	751
Average number of car trips replaced by other modes (incl. e-Bike)	73 per week (1.8 per participant)	54 per week (2.7 per participant)



¹ Number of days with rain obtained from Bureau of Meteorology Daily Rainfall Record for Perth Metro Station and Albany Station (<http://www.bom.gov.au/climate/data/>).

² Total rainfall obtained from Bureau of Meteorology Daily Rainfall Record for Perth Metro Station and Albany Station (<http://www.bom.gov.au/climate/data/>).

³ RAC ran the Metropolitan e-Bike trial in partnership with the City of Perth, City of Wanneroo, North Metropolitan Health Services through the Queen Elizabeth II Medical Centre Trust and the University of Western Australia.

The trial was supported by the Departments of Transport and Sport and Recreation through the *Your Move* program.

⁴ RAC ran the Regional e-Bike trial in partnership with the City of Albany and the Department of Sport and Recreation.

Combined, the two trials resulted in:

Almost
3,000 
e-Bike trips being made (for any purpose)

More than **half** 
of all commuting trips being made by e-Bike

Almost
1,300   **trips**
being replaced by other modes for commuting purposes

34 of 49  **participants**
reporting combined financial savings totalling an average of almost \$1,800 per week

31 of 60  **participants**
purchasing an e-Bike at the end of the trial

Lessons learned

We loved the idea of activating behaviour change messages by implementing a practical project. The trial could be easily replicated by other organisations and tweaked to suit local needs!

Key lessons include:

- > **Maximise opportunities for engagement to encourage support and generate interest** amongst partners and participants -
 - > engage with potential partners and stakeholders early to define roles and responsibilities, and create a sense of shared ownership;
 - > encourage a "community feel" amongst participants (e.g. through appointing a passionate coordinator / champion, hosting a launch event, running competitions, encouraging participant interactions through social media, etc.);
 - > explore opportunities for cross promotion with other relevant activities and programs (e.g. behaviour change programs such as *Your Move*, local and community events, etc.);
- > **Understand and manage risks during trial design** (through risk assessments) and ensure the risks and responsibilities are effectively communicated to participants, allowing them to manage their personal risk and feel confident to embrace a new way of commuting;
- > **Address operational considerations** such as procurement of e-Bikes (consider the needs of users in selecting the bikes and ensure repairs, servicing and warranty arrangements are covered in a supplier agreement), access to on-site parking and locations for charging, and breakdown and repair procedures; and
- > While it may be a short-term trial the goal is to achieve longer-term outcomes so **consider the "exit strategy"**, and identify opportunities to encourage sustained behaviour change and keep the momentum going (for example, participants could purchase an e-Bike from the trial at a reduced rate).