Better Rural City Park Planning and Measuring Walkability to Improve Older People's Health and Well-being

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Better Parks for People project

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Why and how do older people use parks in regional and rural Australia?

Are parks and facilities in the right places?

What is the impact of changing parks and facilities?

Project funded by FACS Liveable Communities Grant Round 1 (2016-2017)

Rachel Whitsed, Rosemary Black, Alexandra Knight and Robin Harvey, in collaboration with AlburyCity

Walkability project

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How easy is it for older people to walk around Australia's regional and rural cities?

Mapping and analysing walkability helps councils better address this important component of liveability

Project funded by FACS Liveable Communities Grant Round 3 (2018-2019)

Rachel Whitsed and Ana Horta, in collaboration with AlburyCity

Better Parks for People project

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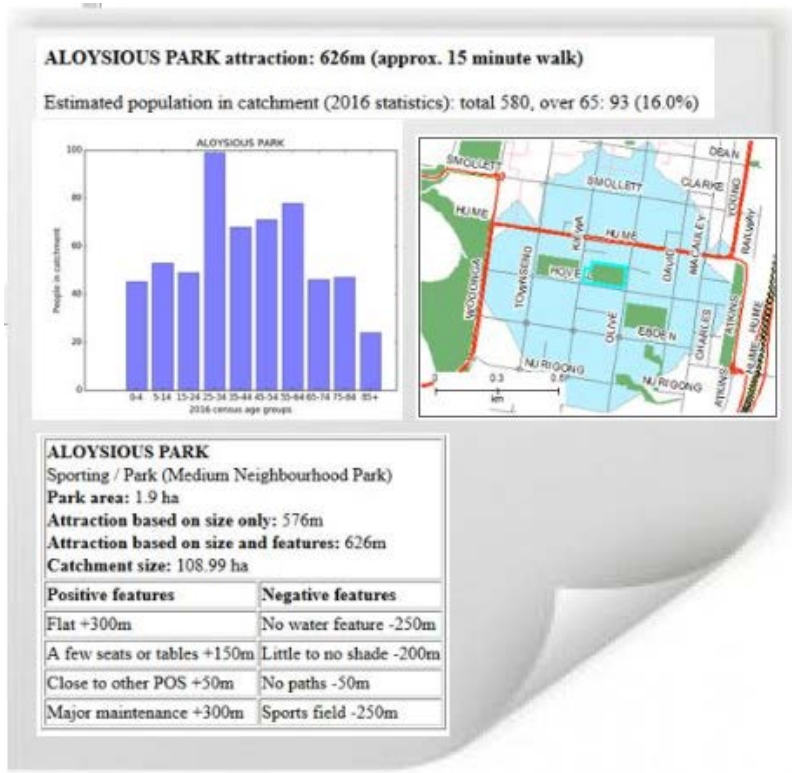
- Spatial tool for strategic park planning in regional towns
- Used by councils to plan and develop parks, targeted to the needs of older people
- Prototype tool developed in conjunction with AlburyCity



ALOYSIOUS PARK attraction: 626m (approx. 15 minute walk)

Estimated population in catchment (2016 statistics): total 580, over 65: 93 (16.0%)

ALOYSIOUS PARK
Sporting / Park (Medium Neighbourhood Park)
Park area: 1.9 ha
Attraction based on size only: 576m
Attraction based on size and features: 626m
Catchment size: 108.99 ha

Positive features	Negative features
Flat +300m	No water feature -250m
A few seats or tables +150m	Little to no shade -200m
Close to other POS +50m	No paths -50m
Major maintenance +300m	Sports field -250m

Parks are important for older people

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Research shows that using parks provides physical health, mental health and social benefits for older people

Walkability is particularly important

- What attracts older people to parks?
- What limits park use by older people?
- How can we make parks more useful and accessible for older people?

Project approach

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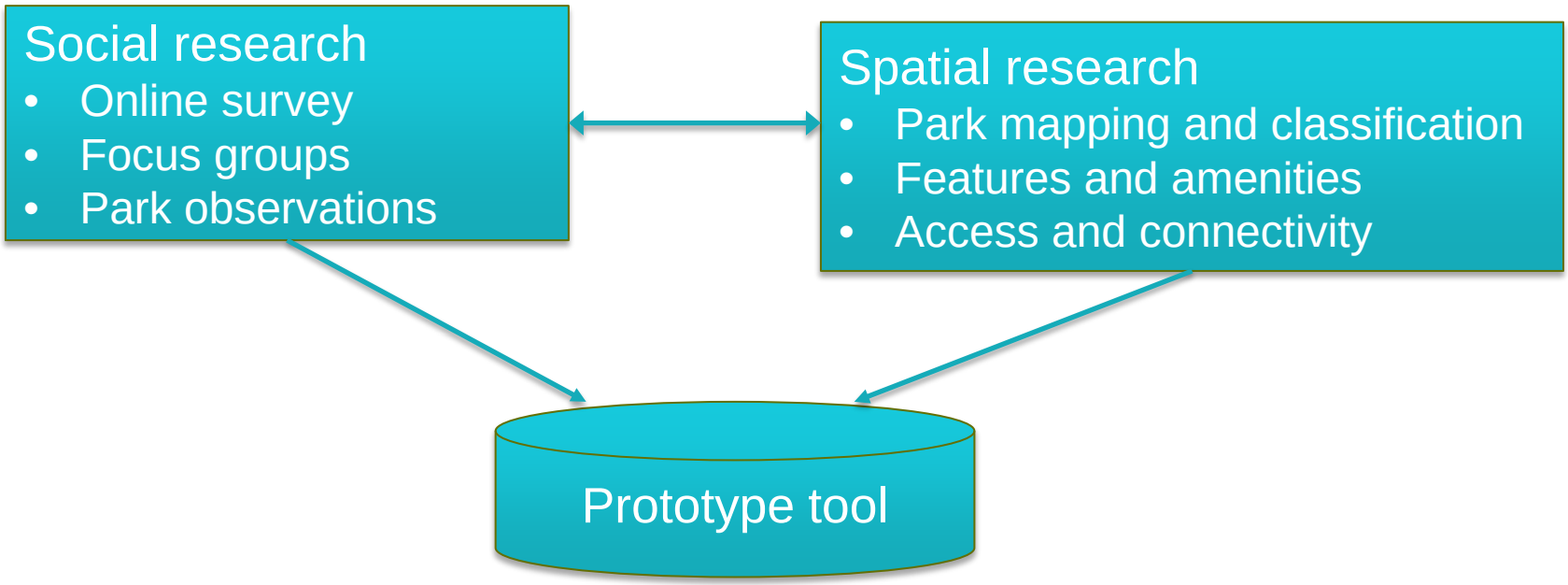

Social research: online survey

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143 respondents, 57 aged over 65

How often do you visit parks in Albury?

Why do you visit the parks and playgrounds in Albury?

How important is it that facilities are in the park?

Toilets, seats, paths, car park, playground,…

How important is it that the facilities are quick and easy to get to from one another?

How important is it that the park is easy to get to?

How important are natural features of a park to you?

- Water, trees, bird life,…

Social research: focus groups

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6 focus groups, 4-18 people in each, aged over 65

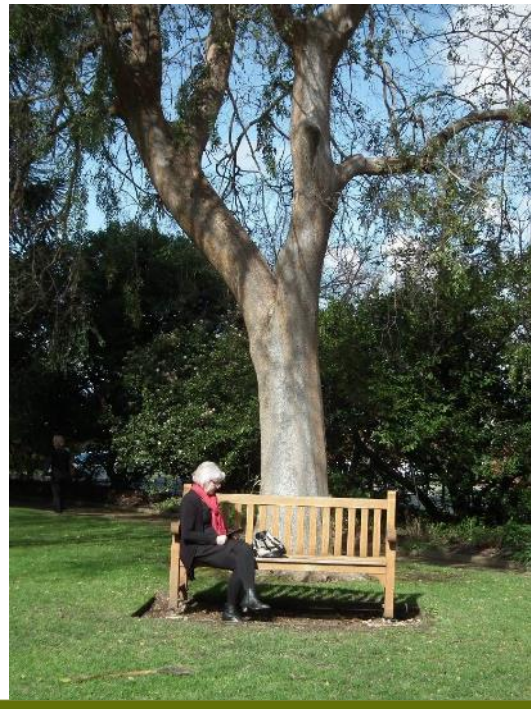
Walking is the key activity undertaken in parks

Socialising, community events and quiet enjoyment of nature are also very important

Facilities which support these activities include toilets, paths, frequent seating, shade (including trees and shelters)

Natural features are very important – trees, river, birdlife

Places for activity – free tennis court, seniors' playground



Social research: focus groups

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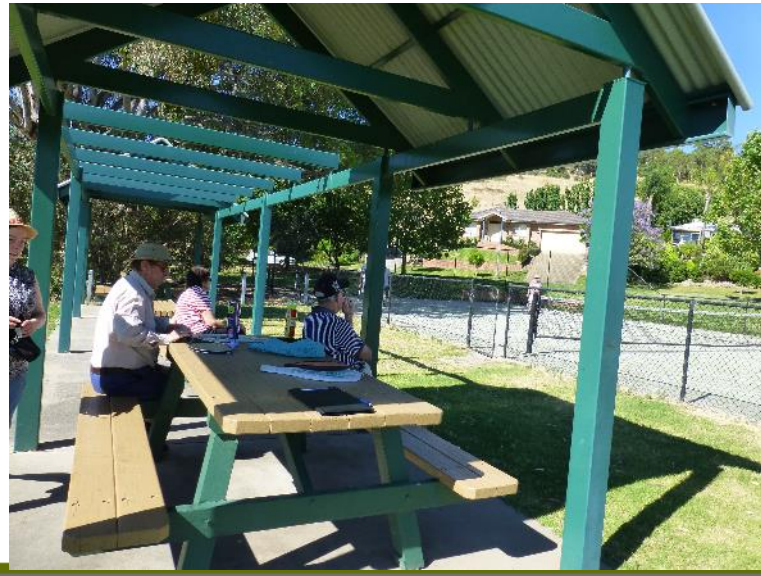
"Well, you're in the bush. You're away from the traffic. You have good toilets. There's tables, there's seats"

"…the sportsground has probably bugger all shade. You can't sit down anywhere. So I think as far as parks go you'd avoid sportsgrounds. You'd keep away from them. But then as long as there's somewhere to sit in the shade and somewhere reasonable to walk on. It doesn't have to be concrete, but as long as it's reasonable and not full of pot holes"

"I don't go if there isn't a toilet"



Social research: park observations

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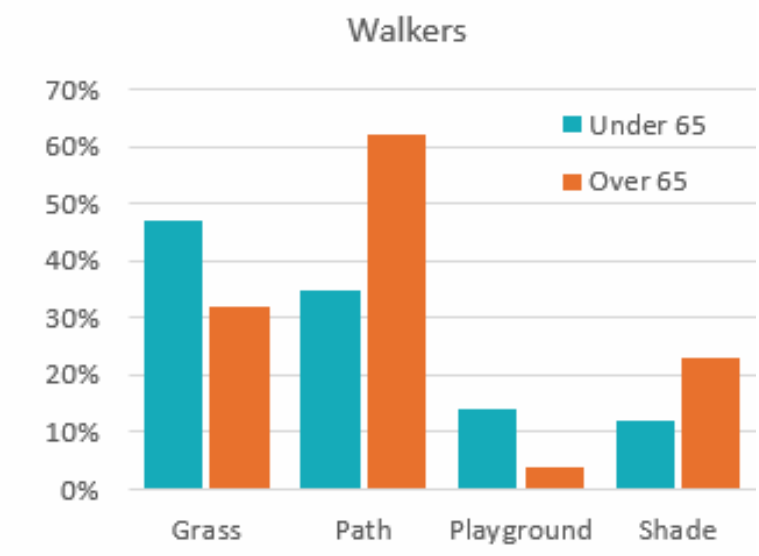
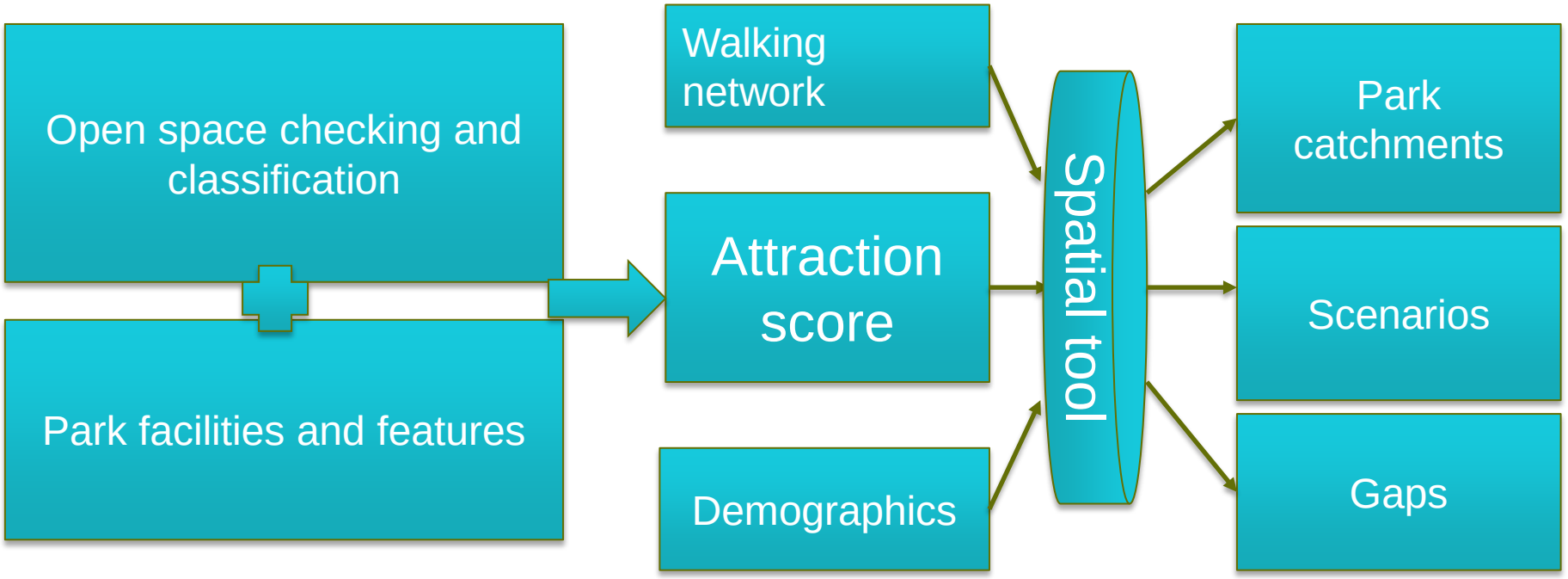
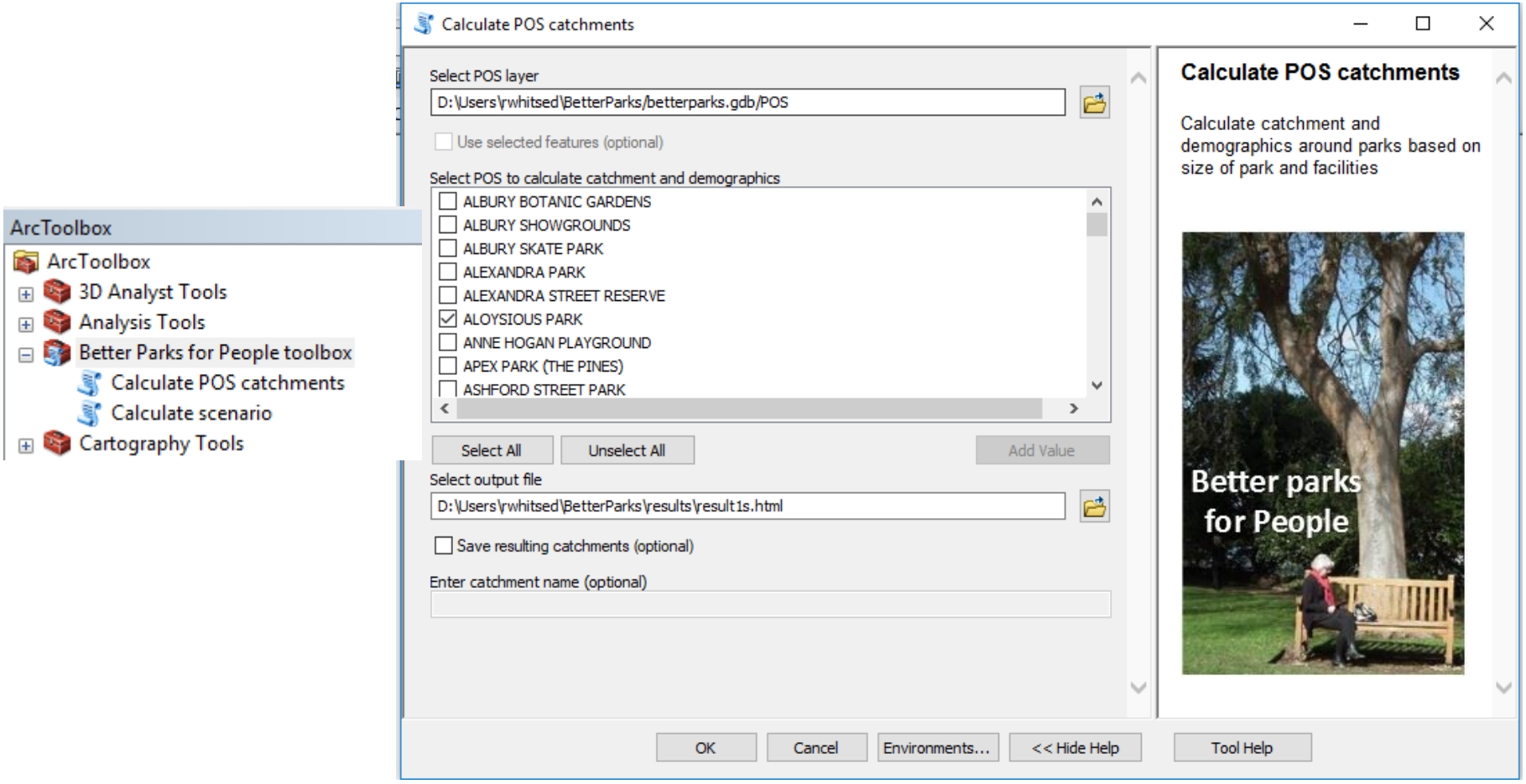
- Observed 15 park locations over 6 days at 4 different times
- Modified SOPARC methodology to get key information on facility use by different demographics
- 1,660 people observed, 135 aged over 65




Open space checking and classification
Park facilities and features
Walking network
Attraction score
Demographics
Spatial tool
Park catchments
Scenarios
Gaps


ArcToolbox
ArcToolbox
3D Analyst Tools
Analysis Tools
Better Parks for People toolbox
Calculate POS catchments
Calculate scenario
Cartography Tools
Calculate POS catchments
Select POS layer
D:\Users\rwhitsed\BetterParks/betterparks.gdb/POS
Use selected features (optional)
Select POS to calculate catchment and demographics
ALBURY BOTANIC GARDENS
ALBURY SHOWGROUNDS
ALBURY SKATE PARK
ALEXANDRA PARK
ALEXANDRA STREET RESERVE
ALOYSIOUS PARK
ANNE HOGAN PLAYGROUND
APEX PARK (THE PINES)
ASHFORD STREET PARK
Select All
Unselect All
Add Value
Select output file
D:\Users\rwhitsed\BetterParks\results\result1s.html
Save resulting catchments (optional)
Enter catchment name (optional)
Calculate POS catchments
Calculate catchment and demographics around parks based on size of park and facilities
Better parks for People
OK
Cancel
Environments...
<< Hide Help
Tool Help

Spatial research: feature importance

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Estimate park catchment based on walking distance – specifically calibrated for older people

Positive – more likely to visit	Negative – less likely to visit
Water features – river, lake	Sporting field
A lot of tree shade	Skate park
Paths	Rugged terrain
Seats	Not maintained
Toilet facilities	
Large playground	

Spatial research: tool output

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Spatial research: tool output

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Spatial research: tool output

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Spatial research

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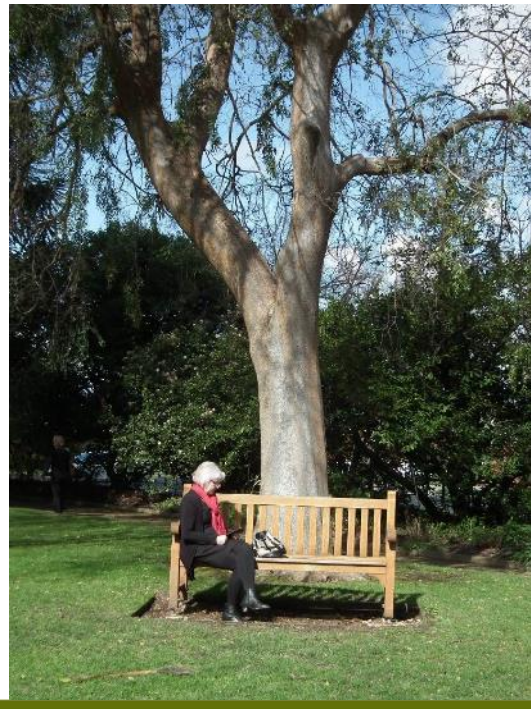
The tool helps address a number of questions

What are the demographics around each park?

Are the right parks in the right places with the right facilities for the demographic catchment?

Where are there gaps in open space provision?

What happens when changes are made to parks and facilities or demographics in the area?



Summary: Better Parks for People

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- Tool developed specifically for regional cities
- Provides rapid and robust analysis and scenario modelling of open space provisions for different demographics
- Highlight parks where changes could have a significant impact on the health and well-being of the local aged community in a regional city
- Valuable insights into what older people in regional cities value in parks and how they use them

http://thinkspace.csu.edu.au/bpfp/

Walkability project

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Assessing and developing a walkability index targeted to older Australians in regional cities

- Measure the walkability for older people in Albury
- Model and map walkability by selecting and validating appropriate factors that contribute to this measure
- Model the relationship between health status, walking and the built and natural environment

Source: Bilal *et al.* 2016

Walkability project

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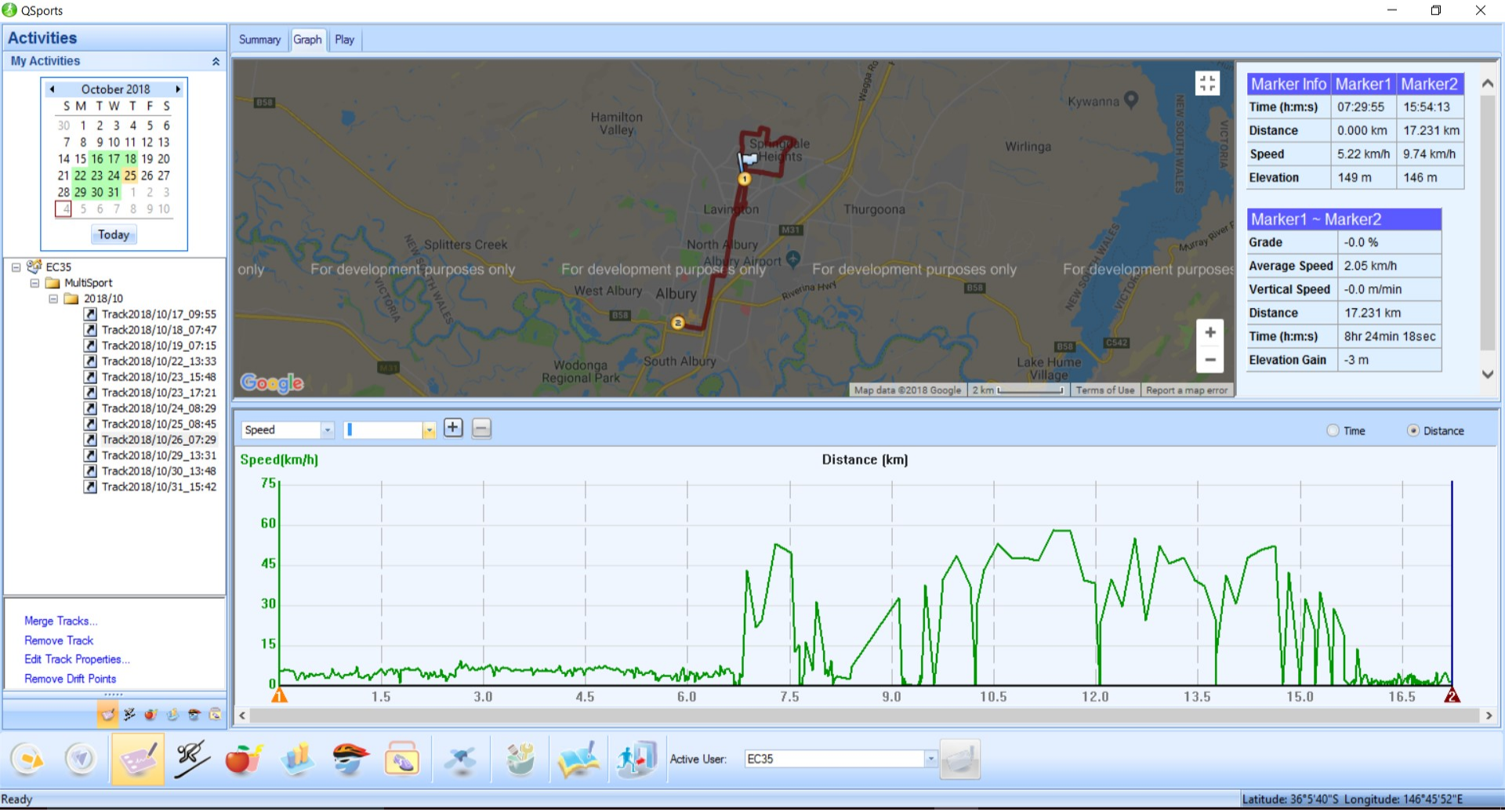
- Participants are recruited to wear a small GPS tracker for two weeks (QStarz BT-Q1300ST)
- Demographic and self-reported health data collected via survey
- Repeated over 2-3 seasons (spring, summer, autumn)
- Locations, levels of activity and time of activity mapped


QSports
Activities
My Activities
October 2018
Today
EC35
MultiSport
2018/10
Track2018/10/17_09:55
Track2018/10/18_07:47
Track2018/10/19_07:15
Track2018/10/22_13:33
Track2018/10/23_15:48
Track2018/10/23_17:21
Track2018/10/24_08:29
Track2018/10/25_08:45
Track2018/10/26_07:29
Track2018/10/29_13:31
Track2018/10/30_13:48
Track2018/10/31_15:42
Merge Tracks...
Remove Track
Edit Track Properties...
Remove Drift Points
Summary
Graph
Play
Hamilton Valley
Springdale Heights
Wirlinga
Kywanna
Lavington
Thurgoona
Splitters Creek
North Albury
Albury Airport
West Albury
Albury
Wodonga Regional Park
South Albury
Lake Hume Village
For development purposes only
Map data ©2018 Google
2 km
Terms of Use
Report a map error
Marker Info | Marker1 | Marker2
Time (h:m:s) | 07:29:55 | 15:54:13
Distance | 0.000 km | 17.231 km
Speed | 5.22 km/h | 9.74 km/h
Elevation | 149 m | 146 m
Marker1 ~ Marker2
Grade | -0.0 %
Average Speed | 2.05 km/h
Vertical Speed | -0.0 m/min
Distance | 17.231 km
Time (h:m:s) | 8hr 24min 18sec
Elevation Gain | -3 m
Speed
Time
Distance
Speed(km/h)
Distance (km)
75
60
45
30
15
0
1.5
3.0
4.5
6.0
7.5
9.0
10.5
12.0
13.5
15.0
16.5
Active User:
EC35
Ready
Latitude: 36°5'40"S Longitude: 146°45'52"E

Walkability project

Index of walkability will be developed related to natural and built environment

In Albury but would like to expand to other regional locations simultaneously

thinkspace.csu.edu.au/walkability/

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