

Cardigan Commons

RESEARCH PROJECT SUMMARY



Acknowledgement of Country

RMIT PlaceLab acknowledges the people of the Woi wurrung and Boon wurrung language groups of the Eastern Kulin Nations on whose unceded lands we conduct the business of the University.

RMIT PlaceLab respectfully acknowledges their Ancestors and Elders, past and present, as the original and continuing Makers of Place.

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Version 1.0

RMIT PlaceLab Initiative

RMIT PlaceLab is an urban initiative connecting community, shaping place and taking a radically different approach to doing research.

Designed to free research from the campus and bring researchers street-side to connect with local government and groups, RMIT PlaceLab facilitates site-based research to support the co-creation of new ideas, partnerships, and systems that grow positive community impact.

Dynamic, actionable and accessible, RMIT PlaceLab Research Projects are bite-size and community-engaged, generating insights, ideas and solutions that can be implemented together with our government and place-making partners.

Cardigan Commons Research Project

Long Story Short

RMIT PlaceLab's **Cardigan Commons** Research Project explored the potential of Cardigan Street, Carlton to transform into a more inclusive, collaborative and wild 'greenscape', with a focus on community perspectives and aspirations.

What We Explored

What would it look like to transform Cardigan Street into an innovative green space that enhances local ecology, environmental health, and community wellbeing?

We explored this question by investigating community perspectives and hopes for the streetscape, barriers and concerns about the change, opportunities to shift perspectives, and collaborative ways to design a space.

The project engaged with local community groups and key stakeholders using both online surveys and face-to-face workshops. Activity culminated in a Zine outlining the Project's findings, an Exhibition showcasing both student and community visions for the future of Cardigan Street, as well as a series of on-street planting eco-system prototypes. Through these efforts we hoped to help create new visions of what Cardigan Street could become, and a community engaged in the process of its becoming.

“ A Urban open spaces can be highly contested areas – the many stakeholders and constraints involved make it challenging to balance the needs for transport, biodiversity, recreation, and other amenities.

Cardigan Street is located in Carlton, Melbourne. The street runs parallel with Swanston Street and Lygon Street. For this Project, the focus was on the section of Cardigan Street between Queensberry and Victoria Streets.

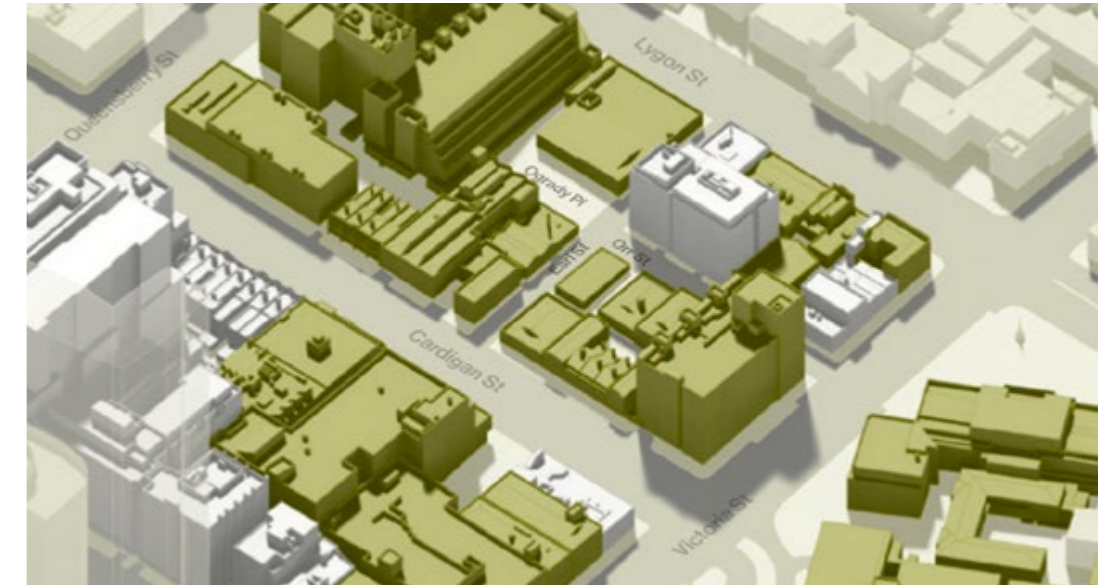


Figure 1. 3D model view of Cardigan Street, Carlton. Note the green shaded buildings are representative of RMIT buildings in the area. Image: RMIT

RMIT University is developing a proposal to consider transforming part of Cardigan Street into a pedestrianised, greened, public space. This would be part of RMIT's Social Innovation Precinct - a place where technology and society come together. Additionally, the future State Library Metro Station will trigger unprecedented changes to the area as a new connectivity/transport hub on the fringe of Melbourne's CBD. These two major urban development initiatives therefore provided an opportunity to rethink the future of this street.

Considering the global challenges imposed by the climate crisis and socio-spatial inequalities, our urban environment can create opportunities for mitigating biodiversity loss and extreme weather events through greening strategies and strategic partnerships.

In this regard, RMIT PlaceLab's **Cardigan Commons** Research Project subscribes to the UN Sustainable Development Goals (SDGs) and provides insights to the following goals:

This research is a pre-emptive move to gather community together and to better understand their perspectives, including potential barriers to revitalising Cardigan Street. Our project tackles the challenge of representing these many perspectives. We also sought to understand the impact of



Figure 2. Aligned UN SDGs Icons.

² <https://sdgs.un.org/goals>

educational events on relationships with urban nature, and, to investigate new ways to collaboratively envision a street.

In this way, we hope this Project will reveal the desire lines of the street's future before they are walked.



Figure 3. Walking tour of Cardigan Street, Carlton during the RMIT PlaceLab Co-Lab for Cardigan Street Workshop. Image: Dijana Risteska

3 Methods

We defined and developed three research/engagement activities that aimed to respond to different questions, relevant for the global challenge of bringing nature to our urban environments, yet locally specific to Cardigan Street.

- 1 **Online Survey:** What does the community think about urban greening and the present/future of Cardigan Street?
- 2 **Wild Nights:** Can we promote understanding and care for urban nature through interactive events?
- 3 **Co-Lab for Cardigan:** How can we design our streets collaboratively and with a more-than-human approach?

These three activities tackled a complex problem from multiple angles. In this way, **Cardigan Commons** presents somewhat as three projects in one, but with a common goal of finding pathways towards greening and revitalising Cardigan Street, and potentially other soon-to-be urban open spaces.

Additionally, we engaged with RMIT students and academics across different disciplines of the College of Design and Social Context (DSC), including Industrial Design and Landscape Architecture, to envision what a future Cardigan Street might become.

3.1 Research Methods

Our primary research activities listed below occurred over three months: July, August, and September 2023.

3.1.1 Online Survey

We gathered survey responses over two months, from July 3rd to August 27th. The Survey was promoted via the RMIT PlaceLab Instagram and website, word of mouth, posters and flyers distributed around the RMIT City campus, and QR code decals on the PlaceLab Melbourne Studio windows.

The Survey questions focused on perceptions of Cardigan Street now, what participants would like its future to be, questions to understand their relationship with nature, and general demographics. Survey data was analysed using a mixed-methods approach.

3.1.2 Co-Lab for Cardigan

Cardigan Commons 'Co-Lab' was a collaborative design workshop, and the chance to test out our 'Co-design' Toolkit. It had the purpose of bringing together different voices with competing needs and interests around Cardigan Street's public space.

Why Co-design?

With climate change, biodiversity loss, and urban isolation becoming pressing global concerns, cities are an opportunity hotspot to address these critical challenges (Oke et al, 2021). For this potential to flourish, societies must not only redesign our built environment, but also the development processes in which these evolve (Goličnik, 2020). When it comes to public space, as a shared asset of the city, it is particularly challenging ensuring that the multiple stakeholders with agency and/or interest are taken into consideration through collaborative design processes. While co-design has been identified as a pathway for effectively increasing green areas for biodiversity enhancement in the city (Basnou et al, 2020), inclusive community engagement is seen as a pathway to congregate stakeholders, improve social cohesion and create smart sustainable cities (Bokolo, 2023).

How to Co-design the Commons?

There are a wide variety of co-design methodologies, also known as 'Participatory Design' (PD) (Halskov et al, 2015), that aim to bring different stakeholders together and express their individual

and collective dreams for the city. These efforts seek to overcome 'The Tragedy of the Commons' and create spaces that foster the needs of the community, promote their stewardship of the land, and create places that thrive both for humans and more-than-humans (Hernandez-Santin et al, 2023). For a successful 'PD' to take place, community engagement requires a critical place-based approach for meaningful citizen participation (Arnstein, 1969), seeking consensus building (Innes and Booher, 1999) to overcome the inevitable conflict that arises when shaping urban landscapes, while also considering the multiple desires of the citizens that give meaning to that place and the space constraints of the public realm.

On the 20th and 21st of September 2023, we invited various stakeholders to imagine the future of Cardigan Street by testing out the PlaceLab community engagement tool Co-design Toolkit for envisioning public space, that provides qualitative and quantitative data to inform initial concept designs for the street.

These events were promoted on PlaceLab's Instagram and website and a relevant invite developed. We also letter dropped to businesses and residences on or near Cardigan Street and created a Post-event Survey.

Co-design Toolkit

As a collaborative design method, the Co-design Toolkit 'template' included an instructional leaflet to guide participants through the workshop activities as well as prompts for facilitators in the discussion held, and a methodology to analyse the results.

The toolkit's first activity is about aligning values between group members. For the second activity, the toolkit draws on a 'blob' system, consisting of large magnets, drawing inspiration from Tetris pieces and featuring a five colour themes: green for 'Urban Nature', orange for 'Collaboration', purple for 'Recreation', pink for 'Moving' and blue for 'Other'. These can be positioned on a whiteboard along with participant's handwritten notes to help communicate ideas and desires without having the formal constraints from traditional design exercises. Facilitator prompts can include questions like "What would you like to do on your Street?" and "What is the street of your wildest dreams?". The answers are then linked to the relevant blobs. As a result, the Toolkit aims to create a 'word cloud' from the participants' values and a collage-like collaborative map of the street.

Post-event Survey

Further to the Co-design Workshop we sent out experience surveys after the workshops to hear about participants' perspectives.

3.2 Research Data Analysis

In undertaking these research methods, data gathered from each activity was analysed individually before overarching themes were identified across the **Cardigan Commons** Research Project.

- **Online Research Surveys:** Quantitative survey data was analysed using Qualtrics. Qualitative survey data was analysed using a mixed methods approach.
- **Co-Lab for Cardigan Workshops:** Responses from each of the participating groups were analysed through a matrix system aligned with the coding used from the developed 'Toolkit'.

This research was undertaken over the course of six months as part of the RMIT PlaceLab initiative which aims to conduct short-sharp research activity. Given the short timeframe, there were naturally limitations on conducting a more extensive literature review and in-depth analysis that would be common for traditional academic research. We aimed to provide the maximum benefit within this time to yield results that would be beneficial for future planning and research.

Additionally, the time constraint limited the scope to recruit representative community groups, and link in more closely with community organisers. For this reason, the project primarily focuses on presenting initial insights and the methodologies we developed, rather than showcasing data resulting from a long-term strategic community engagement process. We aim to provide preliminary data, methods for engaging community and insights of a process to reimagine the future of collective open spaces in relation to the communities that give meaning to place. Potentially, streets such as Cardigan can transition into biodiverse environments with a connected and resilient community, fulfilling the opportunity to assist in the global transition for our societies to thrive.

3.3 Community and Student Engagement

In conjunction with our research activities we explored a variety of ways to engage with community and student groups on the topic of Cardigan Streets future and potential.

3.3.1 Wild Nights

We know that spending time in nature is good for your wellbeing (Lackey et al, 2021), but people in the city have fewer opportunities to do so. This is coined the "extinction of experience" (Soga and Gaston, 2016). This phenomenon means that city-dwellers tend to miss out on the benefits of nature interactions. The extent to which we feel a part of the natural world, "nature connectedness", has been linked to happiness (Capaldi et al, 2014). So, we wanted to foster a greater connection to nature through our events.

Additionally, the Victorian's Value Nature survey (Lee, 2023) shows that generally, and especially for city dwellers, Victorians don't always view urban areas as an important place for plants and animals to live. However, many important species live and *thrive* within the city – including endangered species (Soanes, 2018).

RMIT PlaceLab's 'Wild Nights' was an experimental event format devised to connect people with urban nature in Melbourne's city. We paired expert talks with hands-on experiences focused on urban species and ecosystems and invited the community along. These three events included a wildlife experience, a botanical drawing class on eucalypts, and a microbat watercolour class. These events were promoted on PlaceLab's Instagram and website and were public events available via Eventbrite.

Why Hands-on Activities?

We know that not everybody is interested in nature. A 2023 study by Selinske and colleagues found that people in Melbourne who were less connected to nature were not interested in nature events. So how to bring those people the wellbeing benefits (e.g. happiness) we know are associated with that connection?

This series of events was created to have an appeal outside just nature enthusiasts. By having meet-and-greet and art events, we hoped to interest people who were just curious and looking for something fun to do. We were particularly inspired by a 2022 study called, "Exploring integrated ArtScience experiences to foster nature connectedness through head, heart and hand". Renowden and colleagues (2022) ran a similar series of events that engaged participants heads (mind), hearts (emotions) and hands (through physical artistic activities) to nurture a greater connection to the more than human world.

Why a Wildlife Experience?

A study based in Singapore (Ngo et al, 2022) found that direct experiences with wildlife (as opposed to in books or documentaries) influenced a positive attitude towards wildlife and willingness to co-exist with them. This was even true for less desirable species such as bees and crows.

Why Botanical Illustration?

We wanted to create an event to combat "plant blindness" (Kritizinger, 2018). This is where humans are less likely to notice plants in their environment, seeing them as just background noise. This is partly because plants don't have faces, so our brains ignore them. This ignoring of plants has broader implications, creating a disconnect from the natural world, less knowledge, and less appreciation for these important organisms.

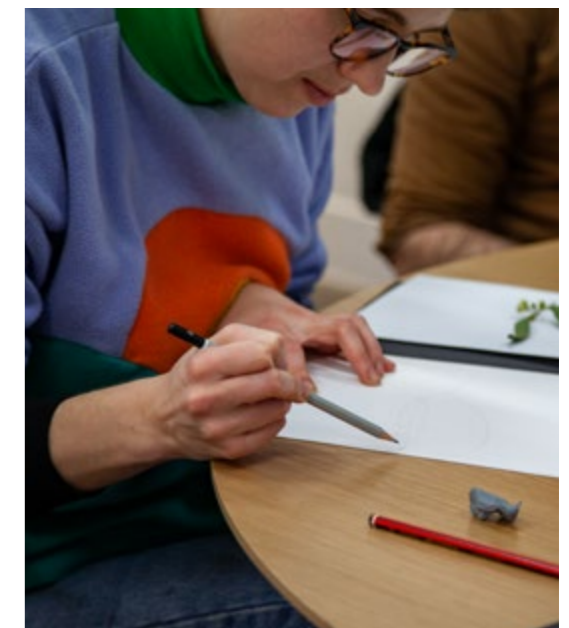


Figure 4. Participant of Wild Nights drawing during Botanical Illustration class. Image: Emily Brigid Short

Why Microbats?

Although we have so many amazing species living alongside us in the city, most people don't know about them. That, and people don't usually like bats. They are often associated with disease and fear. But there's some evidence that greater understanding of bat biology can increase positive attitudes towards bats (Prokop, 2009), which is important to ensure they are given the space they need to help our urban ecosystems function.

We used four methods to understand participants' experience of Wild Nights:

'Vibe Check'

We devised an approach to measure how the mood of the audience might change as a result of their experience. The audience was asked to shout out 'one word' to describe how they were feeling at the start of the event, and again at the end. Time was given until all attendees had a chance to speak to ensure all feelings from the group were represented.

Whiteboard Question

We left an open question on the whiteboard for people to answer, 'how do you feel about nature in the city?', with participants invited to add to it after each event.



Figure 5. Participant of Wild Nights responding to 'Whiteboard Question'. Image: Emily Brigid Short

Visual Storytelling

Moments and information from the evening were captured in an image created by a visual storyteller, to document the evening in an engaging and succinct format.

Post-event Survey

We sent out experience surveys after each session to find out the impact the event had on attendees, with questions focusing on what they thought of the event itself, and how it might have changed their perceptions of urban nature.

3.3.2 Student Studios

We engaged with RMIT Landscape Architecture academics from the School of Architecture and Urban Design – Maud Cassaignau, Heike Rahmann, Brent Greene – as well as Yu Han Go from Salad Dressing. Within a series of learning and teaching based Design Studios, students came up with innovative designs for what a future Cardigan Street could look like.

We also engaged with RMIT Industrial Design students under Dr. Juan Sanin, for their final assessment exploring Tactical Urbanism along Cardigan Street, as part of PlaceLab's 'Cardigan Commons' Research Project.

3.3.3 Exhibition

As part of RMIT PlaceLab's Cycle 02 Research Projects wrap up, from 7th to 20th December 2023 we presented the RMIT PlaceLab Melbourne Exhibition showcasing outputs for our two Melbourne-based Research Projects.

Visitors from across community, local council, industry, local media and RMIT discovered how we explored the community's vision for Cardigan Street. The **Cardigan Commons** Exhibition comprised of printed information panels about the Research Project, student work from Landscape Architecture and our **Cardigan Commons** Zine for the community to take and share.

Additionally, we activated the four on-street planter boxes that were developed in collaboration with the RMIT Landscape Architecture academics to create environments for four different more-than-human species.

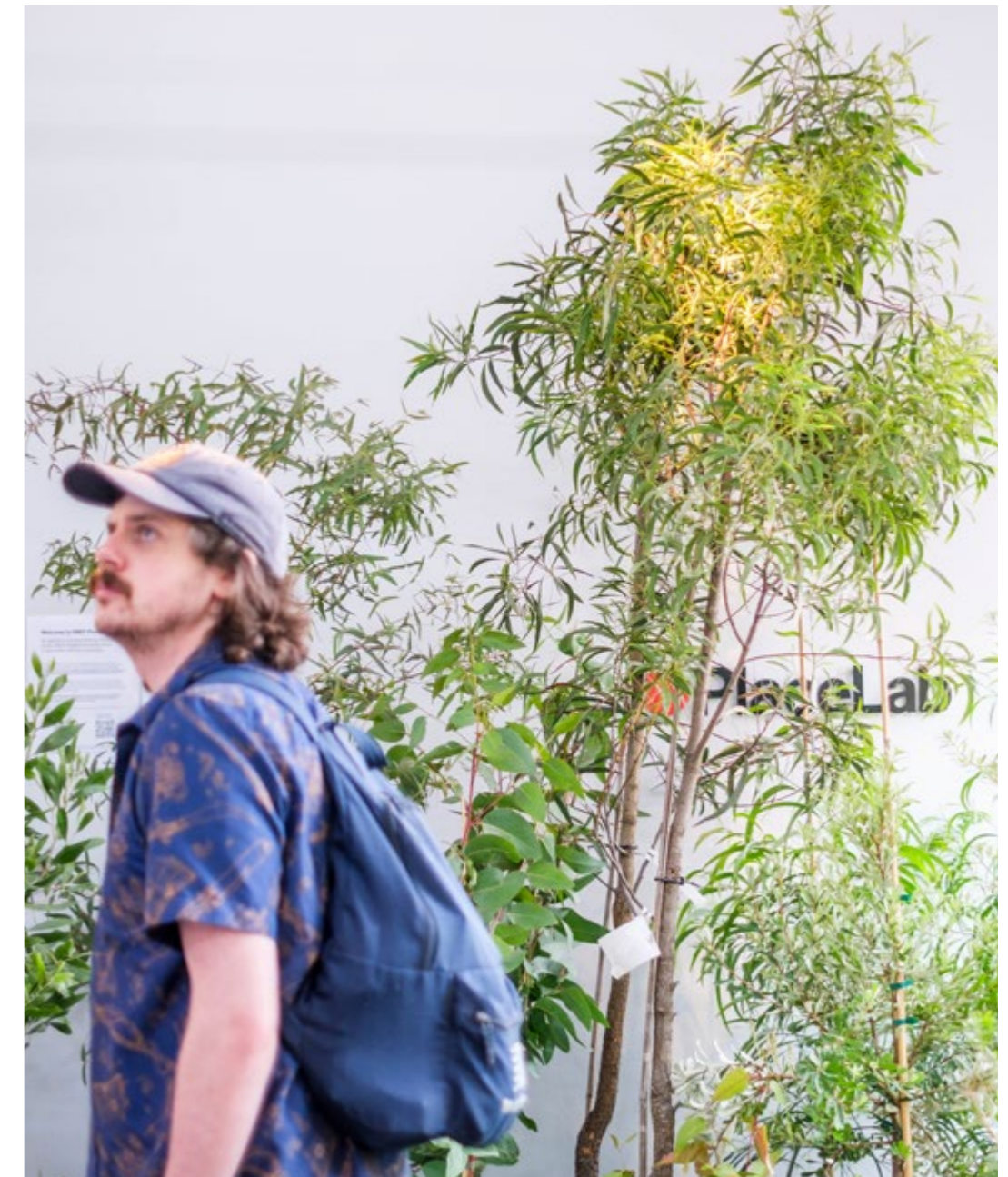


Figure 6. Cardigan Commons Exhibition. Image: Suzanne Phoenix

4 Findings

The findings below are a summary of results. To view the full set of graphs and results for this project, please view our [Zine Report](#), linked on the **Cardigan Commons** project page on the PlaceLab website (www.placelab.rmit.edu.au).

4.1 Online Survey

Over the data collection period we received a total of 212 survey responses. Of these, 41% identified as female, 36% as male, and 5% as gender diverse. When responding to how often they visited Cardigan Street, the most common answer was “weekly”, at 40% of respondents. When asked their relationship to Cardigan Street, 53% were local students, 20% worked nearby, and 28% lived nearby. 79% of participants said (at least some of the time) they travelled to Cardigan Street by walking, and 29% by tram.

The Survey questions focused on perceptions of Cardigan Street now, what participants would like its future to be, questions to understand their relationship with nature, and general demographics. Survey data was analysed using a mixed-methods approach.

When analysing the diversity of survey responses, we established four categories to help systematise the perceptions and preferences of the past, present and future of Cardigan Street.

- 1 **‘Streetscape’** encompassing both the physical attributes of the street and the amenities it provides,
- 2 **‘Mobility’**, covering ‘Location’ (proximity to CBD opportunities, but with a local identity) and ‘Connectivity’ (modes of transportation),
- 3 **‘Urban Nature’** incorporating mentions related to greening or water-oriented structures in the city; and,
- 4 **‘Community’** focusing on the social aspects of Cardigan Street. To comprehensively capture insights from each question, we also established various sub-categories for each, aligned with the values represented in the responses.

4.1.1 Streetscape

People are particularly fond of how the street looks (aesthetics) and feels (ambience). While the patches of greening and general amenities Cardigan Street offers are highly valued (particularly Argyle Square and local cafés), the car-oriented street design, as well as disturbances from construction sites in the area, were criticised. However, the width of the street is perceived as an opportunity to transition and provide residents, workers and students a more human-oriented environment. Respondents were particularly interested in having more sitting spaces, places to meet, shade and greening.

In contrast to the many positive qualities identified in the streetscape’s most liked features, participants identified as negative issues the lack of activities and interactive spaces, night security, development interruptions and general use of materiality. The on-street materials, it’s conditions (uneven concrete), its global scale implications, and their consequences on the experience of public space, are mentioned as negative characteristics.

- Shady trees and spaces to sit were the most popular features for the future of Cardigan Street
- Native plantings were generally highly rated, although native grasslands and wetlands were less frequently prioritised. Biodiverse plantings were moderately positive preferences.

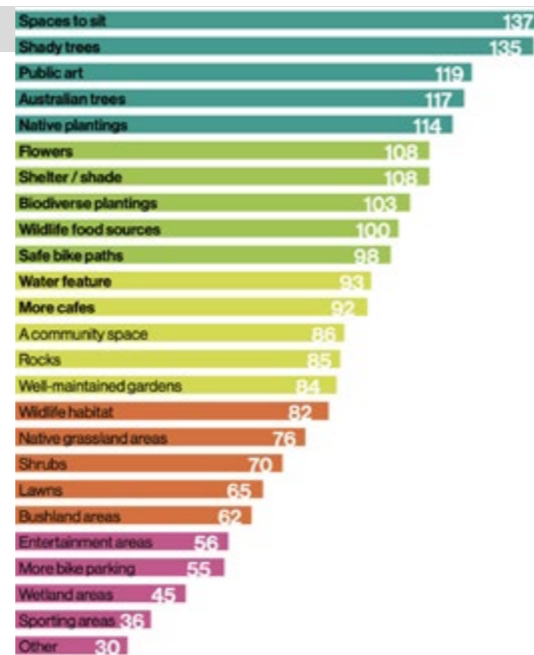


Figure 7: Streetscape Survey results.

4.1.2 Mobility

Cardigan Street is generally perceived as the safe, green and quiet north-south connection alternative to Lygon and Swanston. The central location with a residential-educational vibe is valued.

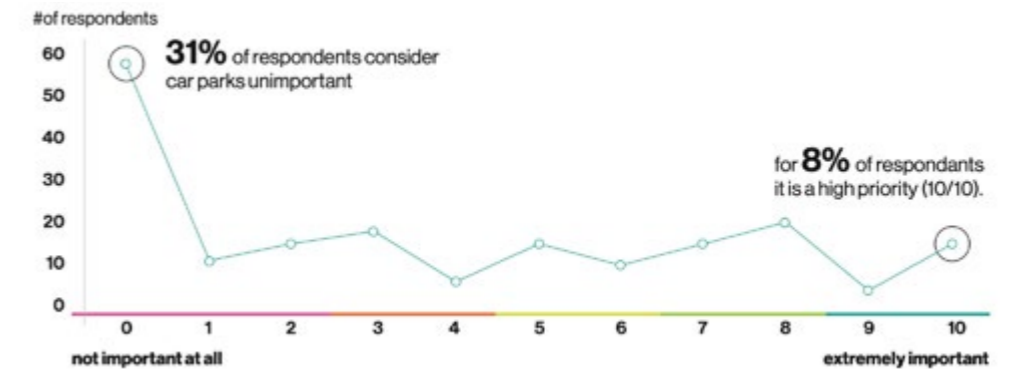


Figure 8: Mobility Survey results.

With Lygon Street to the east (offering bus services and restaurants), Swanston Street to the west (with tram services and a university feel), and the future Metro Station at the intersection of Victoria and Cardigan Street, public transportation is well supplied. There is strong support for more active modes of travel (pedestrian and cycling), but also concerns about parking and car travel.

- The high amount of parking in the area is controversial. Some criticise its negative impact on their experience and the opportunities for the other uses for the space, while others are concerned about the lack of free parking and availability.
- 22% of respondents positioned issues with cars as something they don’t like about Cardigan St. Moreover, cycling and pedestrian issues are related to this tension with cars, increasing this percentage to 31%.

4.1.3 Urban Nature

Cardigan Street’s trees and Argyle Square are green features that are highly valued especially in comparison to other parts of the CBD. When dreaming the future of the street, respondents’ most popular response had to do with having greener spaces while also providing refuge to more-than-human species. In terms of design features, ‘Water Sensitive Urban Design’ and native trees and plantings were also highly valued.

- Of the options for a future Cardigan street of “Green”, “Collaborative” and “Active”, the most popular response was “**Green**” with 69% of respondents voting “strongly agree”.
- When asked about concerns for Cardigan Street becoming more green, 81% of respondents said they had no concerns. For the 19% who said they would have concerns, these included wildlife welfare, maintenance, safety and parking.

4.1.4 Community

Opportunities to socialise were seen as an important characteristic for the street, with an emphasis on more spaces for recreation. Participants also noted a need for exclusive spaces for noisy activities, for quiet and reflective activities, and for more-than-human species to thrive without human interaction.

Respondents valued the student community, and universities were seen as having a potential role in community creation that could reverberate into the public realm. Collaborative spaces could be used by university go-ers and the public alike.

4.2 Wild Nights

All three Wild Nights events sold out our free ticket allocation within one week of being advertised. Each event was well attended. The high level of engagement with these events speaks to the efficacy of tailoring events carefully for audiences and for the season (in our case, indoor Winter events).

Our findings show the benefits of pairing educational events with hands-on activities to engage a wider audience in an immersive way. These events had a clear effect on how people relate to and understand urban nature, including in some cases a new motivation to care for the urban nature around them.

The 'Vibe Check'

There was a shift in mood from the beginning of each event to the end, as shown in the 'Vibe Check', with shifts going from "Tired" to "Refreshed", or from "Curious" to "Informed". The final words speak to the positive experience that was felt across each event.

#1 Urban Wildlife: Meet & Greet		#2 Botanical Illustration: Workshop		#3 Microbat Watercolour: Workshop	
Vibe Check					
Pre-	Post-	Pre-	Post-	Pre-	Post-
Chilled Tired Nervous Excited Interested Hungry	Inspired Hopeful Happy Informed	Tired Relaxed Keen Mobile	Inspired Refreshed Hopeful Capable	Curious Tired Excited Engaged Warm Creative Overwhelmed	Happy Excited Informed Relaxed Energised Proud

The Whiteboard Question

The post-event whiteboard question was built upon over the three events, showing a community of people who feel positively about urban nature in their city.



Figure 9: Whiteboard Question results.

Experience Survey

- 100% of respondents said that the events were both engaging and informative, voting either "agree" or "strongly agree" to these descriptors.
- 50% of participants noted a change in how they connect to nature in the city.
- 88% of participants said their experience at Wild Nights changed either their perspectives or understanding of urban nature.
- People attended for a variety of reasons, including meeting animals, learning about nature, practicing art, taking part in a fun activity, and learning more about the city (for both locals and internationals).

- 19% listed reasons other than nature as the draw card for them.
- 56% listed a mix of nature related and other reasons.
- 25% listed nature as the main reason they attended.

Visual Storytelling

The three whiteboard diagrams resulting from our interactive events can be seen on our 'Wild Nights' [website post](#).

4.3 Co-Lab for Cardigan

Over two days, 23 participants (including representatives of the local community, RMIT academics, students and City of Melbourne representatives) along with facilitators, defined the values they shared as teams, and created a collaborative map of Cardigan Street, following the Co-design Toolkit leaflet instructions.

From the values captured in the Workshops' first activity, we systematised them in a 'Word Cloud'. The most repetitive values were 'Inclusion' and 'Imagination', followed by 'Sense of Belonging', 'Ecological Health' and 'Sustainability'.



Figure 10: Participants during Co-Lab workshop. Image: Dijana Risteska

From the collaborative map captured on the whiteboard, we divided the information between blobs and texts.

Blobs

By tracing the blobs represented by the coloured magnets, we mapped the overlap through a matrix to identify the intensity and order of overlaps.

The base blob used the most, was "Urban Nature", with "Moving" as the most popular action that overlapped: people want to move around in nature. They also want to collaborate, and have recreational zones throughout a natural environment.

Texts

The texts that were linked to the blobs help with qualitative inputs. We used our coding system and divided these between:

- Verbs and Actions
- Infrastructure and Physical Components of the Street
- Other Qualities

5 Reflections

There were many interesting reflections that came out of the 'Cardigan Commons' project and its diverse activities. These included:

- There are people in the community who feel positively about greening on Cardigan Street. Addressing concerns such as parking and safety (of people and wildlife) will be key for any next steps.
- Interactive nature events can have a profound effect on perceptions and understanding of urban nature. They can also lift people's spirits and inspire them to nurture the nature around them.
- Collaborating using hands-on activities can help different voices to be heard, create a sense of community, and enable people to get creative with the complexity of open spaces.
- Some useful take aways for use as part of RMIT's Location Strategy and Social Innovation Precinct work.

5.1 Afterword

We hope that this work will help to create a community of people interested and engaged with the future of Cardigan Street, to serve as a starting point for envisioning the street, and to create forward momentum to a brighter, greener, cooler, and happier future.

RMIT PlaceLab proves what is possible when local community knowledge and expertise informs research. Together, we've tackled real-world, urban challenges and sought innovations that look to improve liveability, community resilience and connection.

Project Acknowledgements

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RMIT PlaceLab would like to acknowledge the contributions of Salad Dressing landscape architects, RMIT students, and City of Melbourne representatives, in participating in **Cardigan Commons** research activities and engagement throughout the project.

Ethics

This Research Project has been assessed and approved by the RMIT University College Human Ethics Advisory Network (CHEAN). Ethics Reference Number: 25586.

Research involving human participants is consistent with the guidelines contained in the Australian National statement on ethical conduct in human research and Australian Code for the Responsible Conduct of Research.

Conflicts of Interest

There are no declared conflicts of interest associated with this Research Project.

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We hope this report sparks more important conversations.

**We'd love to hear your thoughts via:
hello.placelab@rmit.edu.au**

Find out more about the RMIT PlaceLab initiative and our engagement activity, go to:

placelab.rmit.edu.au

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