

SMART MICRO- ACTIVATIONS: A MORE CONNECTED CANBERRA



EXECUTIVE SUMMARY

In 2026, the ACT Chief Minister challenged the ACT Chapter of the Pearcey Foundation:

“Our city centre is rapidly changing. How can our city centre become more connected, inclusive, safe, and efficient using IoT, data analytics, or citizen engagement tools and reflect the changing nature of cities in the post-COVID era.”

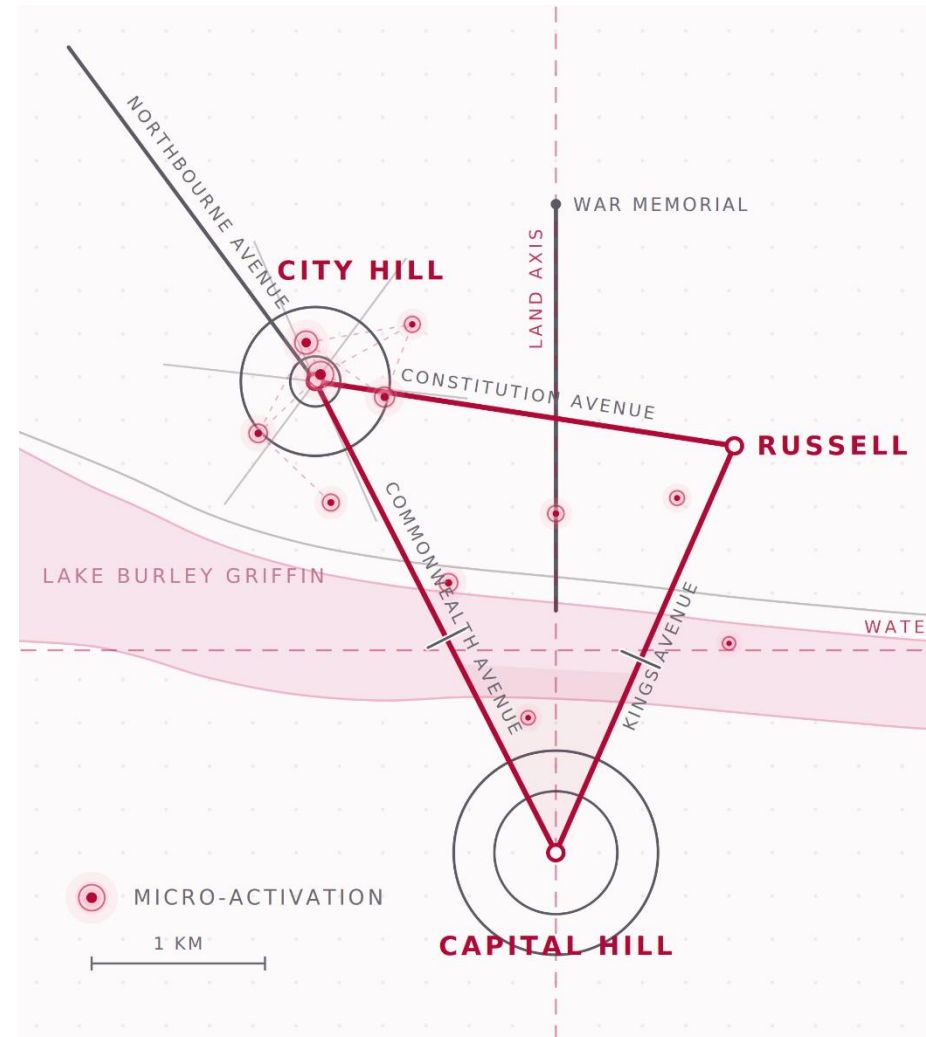
The ACT Chapter of the Pearcey Foundation, collaborating with AI CoLab, and consulting with subject matter experts and interested Canberra residents and workers, responded to that challenge.

Canberra can become more connected, inclusive, safe and efficient by using smart-city technology to support small, place-based *micro-activations* that create visible human benefit.

Drawing on expert input and a workshop of 30 participants, this report proposes five practical trials:

- a night-time connection precinct,
- hyperlocal discovery,
- activation zones in underused public space,
- hosted city loops, and
- pop-up city connectors.

Each should start small, use existing capabilities where possible, protect privacy, retain a clear human pathway, and scale only where evidence shows that people are more able to meet, stay, discover and participate in the city centre.



THE CHALLENGE

In 2026, the ACT Chief Minister challenged the ACT Chapter of the Pearcey Foundation:

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The Pearcey Foundation collaborated with AI CoLab again this year to address the challenge.



COLLABORATORS

The Pearcey Foundation is a non-profit organisation founded in 1998 in memory of a great Australian ICT pioneer Dr Trevor Pearcey. The Foundation operates broadly across the Australian Information Computing and Telecommunication (ICT) technologies sector, from celebrating achievements through national and state awards, to being involved in debate and public policy on critical national issues such as productivity, the digital economy and national infrastructure.



The AI CoLab is a cross-sector initiative bringing together government, industry, not-for-profits and academia to experiment, learn and build capability in AI. Its core values are to be human-centered, inclusive, values-based and experimental.



ADDRESSING THE CHALLENGE

The Pearcey Foundation and AI CoLab sought insights from experts in Smart Cities to develop a focused approach to address the challenge.

Mr James Sankar, President, Australian Smart Communities Association, and Mr Matthew Schultz, Smart City & IoT Expert at GravelRoad, generously assisted us to frame three lenses through which to investigate opportunities for smart cities in Canberra.

WORKSHOP LENSES

- **Everyday access and civic trust** – How could smart-city and civic technology approaches make Canberra easier to navigate for people in everyday life?
- **Country, story, and the night-time city** – How could smart-city systems shape the way people experience place, story, safety and the city at night?
- **Public places and delivery reality** – Which smart-cities ideas could actually improve the city centre as a lived public place?

With this overarching view, our supporters in the ACT Government introduced us to subject matter experts (SMEs) in Canberra who offered contextual insights and prominent issues that smart cities technologies might meaningfully address:

- *Everyday access and civic trust* – Ms Sarah Steed, ACT Libraries
- *Country, story, and the night-time city* – Mr Peter Swanton, PhD candidate, ANU
- *Public places and delivery reality* – Mr Doug Millen, City Renewal Authority

From these exciting and helpful conversations, we developed a workshop to involve friends of the Pearcey Foundation and concerned individuals from government and society in Canberra. The workshop was held on 30 July in Nara House, generously hosted by the ACT Government.

There were 30 participants at the workshop – Pearcey friends, ACT public servants, local innovators, and researchers – who contributed enthusiastically to answer the challenge, channelled through the lenses.

This report has used AI tools to integrate the workshop transcript and summaries into a single narrative that outlines practical next steps for addressing the challenge.



WHAT WE HEARD — CORE THEMES AND INSIGHTS

A prominent theme that emerged early in our investigations and that the workshop reinforced was that our response to the Chief Minister’s challenge would involve important principles to guide how to implement any smart cities projects or initiatives as well as some opportunity areas where specific projects might leverage smart cities technologies to most effect.

Smart micro-activations

During the workshop it became clear that the city is shaped by small, everyday experiences of place. People are more likely to spend time in, return to, and participate in places that feel active, welcoming, and easy to navigate.

Micro-activations emerged as a practical way to create more of these experiences. A micro-activation is a small, place-based intervention that makes a particular street, plaza, park, route, or night-time setting more social, discoverable, or welcoming. Smart-city capabilities can facilitate more reasons for people to meet, stay and participate in specific places across the city centre. The technology can sit in the background: helping identify where an intervention is needed, connecting fragmented information, adapting the environment, or making an activity easier to find.

The motivator for a micro-activation is not whether the intervention looks technologically advanced. It is whether it creates a better human experience in that place: people finding each other, spending time together, discovering an activity, feeling comfortable staying after dark, or being drawn into parts of the city they would otherwise pass through.

WHAT’S A “MICRO-ACTIVATION”?

In smart cities, micro-activations are small-scale, short-term, technology-enabled interventions designed to revitalize public spaces, stimulate local civic engagement, and test urban design concepts before full-scale deployment.

Unlike traditional, multi-million-dollar infrastructure projects, micro-activations leverage low-cost digital tools and modular physical assets to rapidly transform underutilized urban areas—such as alleys, parking bays, or vacant plazas.



PRINCIPLES FOR MICRO-ACTIVATIONS

HUMAN CONNECTION AND CIVIC TRUST ARE THE OUTCOME

- Digitise repetitive or administrative work to release human time, not to remove people from the service.
- Have a clear human handover or recovery path in case people get stuck.
- Use technology to support trusted people and places, not to load extra work onto them without resources.

EARN THE RIGHT TO AUTOMATE

- Sequence deployment by stakes: “walk, run, fly”. Start where failure is cheap, visible, and easy to correct.
- Use “slow design” where speed would reduce understanding, agency, or trust.
- Pilot with real users, make limitations visible, and scale only when the evidence supports it.

USE THE SMALLEST SUFFICIENT INTERVENTION

- Start with the problem, not the available technology.
- Exploit capability that has already been paid for before procuring new sensors, platforms or apps.
- Prefer small, reversible interventions over large, locked-in systems while the need is still being tested.

SENSORS FOR CONDITIONS, NOT PEOPLE

- Draw the privacy boundary around the condition that matters: a light has failed, a path is blocked, a space is occupied.
- Avoid collecting identity or inferring individual behaviour when the outcome does not require it.
- Make it clear what is being sensed, why, and what happens with the data.

CONNECT BEFORE YOU CENTRALISE

- Treat fragmentation as the problem before creating a new platform or system.
- Use technology to translate between existing datasets, services and information, rather than forcing everything into one structure.
- Let people describe what they need in their own terms, without knowing the right category or organisation.
- Put useful information into channels people already use, rather than creating another destination they have to find.

DELIVERY FILTERS FOR CANBERRA

Across all five principles, proposals still need to be tested against Canberra’s scale, cost, durability, operating ownership, and privacy context. Where Country, culture or local knowledge are part of an idea, co-design should shape the intervention from the beginning rather than being added as a cultural layer at the end.

A simple test for the public-facing layer

Any digital or information layer should be:

- easy to discover, understand and use,
- provide a clear fallback if the technology does not work, and
- leave people feeling heard rather than processed.

A clear fallback is particularly important where an activation relies on technology to help someone find a place, event or person. If the system fails, people should still have an obvious next step, such as alternative directions, a non-digital option, or a clear point of contact.

FIVE SUGGESTED MICRO-ACTIVATIONS

The micro-activations summarised here are described in the following sections.

MICRO-ACTIVATION	PLACE OUTCOME	TECHNOLOGY IN THE BACKGROUND	SMALL FIRST TEST
Night-time connection precinct	People stay and gather after dark	Lighting control and measurement	One precinct + one event series
Hyperlocal discovery	People find nearby activity and each other	Listing aggregation and matching	One precinct / defined radius
Micro-activation zones	Pass-through space becomes social space	Aggregated movement and timing data	One or two reversible space trials
Hosted city loops	People explore and share more of the centre	Wayfinding, accessibility and event data	One themed loop
Pop-up city connectors	People get a human bridge into local activity	Search, translation and connected city data	One event or busy location

1 A night-time connection precinct

Opportunity: The city centre is gaining more residents and more reasons to be active after dark. Lighting is therefore not only an infrastructure question, it also shapes whether people feel comfortable staying, walking, talking and participating in the city at night. As the city centre becomes more active at night, getting these conditions right becomes increasingly important.

What a micro-activation could look like: Select one walkable precinct and combine targeted lighting changes with a small program of night-time activity. The aim would be to test whether relatively small changes to the night-time environment can make a place more inviting to use and spend time in. Start with physical fixes such as shielding and re-aiming glare. Where existing controls allow it, test lower or more responsive lighting in suitable areas. Pair the change with something that gives people a reason to experience the place together, such as a starlight walk, guided night navigation, a lantern event, a small performance, or cultural astronomy activity developed with appropriate local partners.

Smart-city role: Use existing lighting controls and environmental data to support the trial: adjusting lighting where appropriate, tracking conditions and helping assess whether the intervention changes how people use the space.

What to test: Whether the changes make the space more comfortable and inviting to use after dark, whether people stay longer, feel comfortable in

the space, participate in the activity, and understand why the environment has changed, alongside energy, complaints and operating impacts.

2 “What’s happening here?” – hyperlocal discovery

Opportunity: Canberra already has small groups, performances, community activities, and informal events that are difficult to discover. The gap is especially visible for activities that do not have the scale or resources to surface through existing channels, even when they may be relevant to people nearby.

What a micro-activation could look like: Create a lightweight discovery layer for one city-centre precinct rather than a new citywide events platform. A person in or near that precinct could ask: “what can I join nearby tonight?”, “what is happening within a ten-minute walk?” or “is there something low-key for my teenager?” and see small community activities alongside major events. Access could sit in existing city websites and channels, with simple place-based entry points such as QR codes at selected public locations.

Smart-city role: Bring fragmented listings together and use location and natural-language search to help people find relevant activities nearby. The value is in making existing activity easier to discover, rather than creating another platform people need to manage.

What to test: Whether small organisations become easier to find, whether previously overlooked activities gain more visibility, whether users attend or enquire, what kinds of activity are missing, and which city locations generate unmet demand.

3 Micro-activation zones in underused public space

Opportunity: Some city spaces are passed through rather than used. Movable seating, co-created spaces, and psychogeography points to a practical question: where could a very small change turn passing through into staying and staying into interaction?

What a micro-activation could look like: Identify one or two spaces and test reversible interventions at the times they are most likely to work. Examples could include movable chairs and tables, communal seating, chess or games, a small performance point, a youth-led art session, a community table, or a recurring low-cost social activity. The intervention can change by time of day rather than permanently redesigning the space.

Smart-city role: Use aggregated footfall, timing, and observational data to help choose where and when to intervene, then evaluate the result. The point is not to track individuals; it is to understand the rhythm of the place well enough to support activity.

What to test: Changes in dwell time, repeat use, participation, comfort, and the mix of people using the space; which types of programming work best at different times of day; and whether the intervention adds to existing activity without displacing how people already use the space.

4

Hosted city loops that reveal more of the centre

Opportunity: People often move through the city by habit, taking the same routes and missing nearby places, cultural activity and public spaces. The workshop raised both wayfinding and psychogeography: understanding how and why people move through the city, and how different routes might encourage more social and cultural interaction.

What a micro-activation could look like: Trial a small set of hosted walking loops that connect existing places rather than building new attractions. A loop might link public art and laneways, small venues and performances, night-sky locations, food, or accessible public spaces. The important element is that the route has scheduled shared moments, such as a host, local story, performance, activity or meeting point, so it creates encounters rather than simply another self-guided map.

Smart-city role: Use accessibility, movement and event data to shape routes and timing, with simple wayfinding to support people along the way.

Where possible, surface the route through navigation tools or channels people already use.

What to test: Whether the loops bring people into less-used parts of the centre, increase engagement with nearby venues and activities, improve confidence navigating the city, create repeat participation, and reveal which routes or shared moments are most effective.

5

Pop-up city connectors where people already gather

Opportunity: Digital discovery still fails when people do not know what to search for, do not speak the language used by the system, or simply want to ask another person. The workshop identified mobile kiosks and human handover as useful and city-specific when placed to support where people are already spending time in the city.

What a micro-activation could look like: Trial a temporary staffed “city connector” at a market, festival, busy public space, or major new city-centre event. The host is there to help people find what is happening nearby, join an activity, choose an accessible route or discover somewhere they would not otherwise visit. It should be lightweight and movable, not a new permanent service counter.

Smart-city role: Give the host a simple search and translation layer that can pull across local event listings, accessibility information, transport and

other relevant city data. The technology supports the host with better information, while the person remains the main point of contact.

What to test: What people ask for in place, which information is difficult to find or missing, whether referrals lead to participation elsewhere in the centre, and where a human connector adds value beyond existing digital channels.

WORKING PROPOSITION

Canberra does not need to make every part of the city “smart”. A stronger approach is to choose specific places where a small use of technology can create a visible human benefit, test it with the people who use that place, and build from what works. The five micro-activations above provide different ways to do that while sharing the same logic: technology coordinates, reveals or adapts; people create the city experience.

SUPPORTING SMART-CITY CAPABILITIES

Several strong ideas from the workshop are better treated as enabling or parallel opportunities than as micro-activations. We list them here to keep the city-centre connection story clear without losing their value.

CONNECTED CITY DATA

Parking, congestion, accessibility and movement data can support the discovery layer, routes and activations when it is made usable outside internal planning systems. For example, parking occupancy, corridor travel times and footpath accessibility are already collected for internal use. The priority is exposing useful data through existing channels, not building another app.

NATURAL-LANGUAGE TRANSLATION

The ability to translate ordinary speech or free text into the categories used by different systems can sit behind discovery, multilingual interaction, and reporting. It is an enabling layer, not a reason to automate every public interaction.

CONNECTED ASSET REPORTING

Melbourne's Urban Forest project's¹ idea of giving public assets identifiers so faults could be reported remains a useful pilot example: simple identifiers and free-text reporting could make public asset reporting more natural while helping link records across trees, drains, footpaths, and maintenance systems. It may also create a more playful relationship with

¹ <https://www.abc.net.au/news/2023-05-21/tree-love-letters-for-city-of-melbourne-urban-forest-project/102362842>

city assets (e.g., Melbourne's residents used the channel to write to the trees rather than about them), but its primary value is operational rather than people-to-people connection.

RESPONSIVE MAINTENANCE

Condition sensing, limited to conditions rather than people, and faster response to rubbish, damaged assets, lighting faults, or blocked paths can make public places feel safer and more welcoming. This is important background infrastructure for successful activation even where the maintenance technology is largely invisible to the public, as with the sensors already operating around the Arboretum. Also, the recent "pothole politics" approach seen in New York City illustrates the political benefit of responsive maintenance.

USE THE RENEWAL WINDOW WITHOUT OVERCOMMITTING

City Hill and London Circuit are already being reshaped, with major changes to movement, public space and the number of people living in the centre. Where an activation may eventually need power, mounting points, network access, lighting control or other physical provision, it is worth considering those needs while works are underway. That does not require committing now to an untested technology or permanent program; physical readiness and program design can move at different speeds.



A BONUS, CROSS-CUTTING IDEA

One technological suggestion that arose while discussing micro-activations and other ideas, involved labelling the city in QR codes to provide access for residents and visitors where they were, when they needed it.

The ACT Government could label points of interest, or attractions, gathering locations, and significant waypoints in and around the city with QR codes that, when read by a smartphone, present information on the location and any upcoming events, or guidance on how to activate the site, engage with whatever is going on, or even way-finding instructions to other locations.

The underlying database of information accessed by each QR code should incorporate relevant government information about the site/location and event or activity information sourced from local directories and media (e.g., Canberra Digest, Her Canberra, Region Media, The Canberra Times, City News, Canberra Weekly, Facebook Canberra notice board groups, etc).

The government already has the system infrastructure through its Check-In CBR app, developed for the COVID pandemic. This app might be re-released as, say, the CBR app.

Such a directory app could be extended over time to integrate with the ACT Digital Account (<https://www.myaccount.act.gov.au/s/daabout>) to provide access to government services or even act as an identity or charge card (e.g., hosting a digital driver's license, ACT Seniors cards, MyWay+ payments, etc).

CONCLUSION

The Chief Minister's Challenge uncovers the opportunity to use smart-city capability in a way that is practical, visible and distinctly human. The strongest response to the challenge is not a single platform or large technology program, but a series of small, place-based trials that make the city centre easier to discover, more welcoming after dark, and more conducive to meeting and participating.

The five micro-activations identified through our consultations provide practical starting points. Each can be tested in one location, using existing capabilities where possible, with clear operating ownership, privacy boundaries, and human support. Each micro-activation includes measures of whether people stay, connect, discover and return. The results should determine what is adapted, stopped, or scaled.

Technology should remain in service of the place and the people who use it. By starting small, learning in public, and building from what works, Canberra can create a city centre that is not only smarter, but more connected, inclusive, safe, and alive.



APPENDIX: EARLY THINKING ON IMPLEMENTATION

Many of the ideas that arose through the investigation and workshop phase resonate with themes and plans in existing ACT Government strategies, especially:

- **ACT Digital Strategy** — <https://www.act.gov.au/open/act-digital-strategy>
“The ACT Digital Strategy sets out how we will use technology to grow Canberra as an inclusive, progressive and connected city.”
- **City Renewal Authority Strategy 2025-2030** — <https://www.act.gov.au/cityrenewal/about/our-strategy>
“VISION: The City Centre is the heart of Canberra: a captivating gathering place where creativity, work, life and leisure come together.”

How to read this appendix

The ideas here extend beyond the city centre brief and have not been tested with workshop participants or subject matter experts. The five micro-activations in the body of this report remain the response to the Chief Minister's challenge. Nothing in this appendix replaces them, reorganises them, or gathers them under a single program.

Following the workshop, a discussion with Mr James Sankar contributed a further set of ideas, developed with AI assistance, which extend the scope

from what to trial towards how a response might be sustained and grown. That material has not been tested with workshop participants or with the subject matter experts, and parts of it reach beyond the city centre. It is recorded here to keep the thinking available and complement the main report with a broad perspective grounded in Mr Sankar's expertise. Where the ideas connect to the five micro-activations, the connection is noted.

Treating existing places as one network

Libraries, community centres, shops, cafes, schools, clubs, health facilities and government service points already form a network. They are treated as separate facilities largely by administrative habit. Connecting them rather than building something new extends the principle of connecting before you centralise. At a city scale it describes what hosted city loops and hyperlocal discovery attempt at precinct scale: revealing what already exists and making it easier to reach.

A working name offered for the idea is *Canberra's Community Commons Network*. This report does not propose it as a program. If several micro-activations succeed, it is one account of how they might later join up.

Somewhere to be during the working day

Hybrid work has left many people working alone at home for part of the week. Rather than building co-working facilities, the suggestion is to use spare capacity in places that already exist – bookable desks and quiet spaces in libraries, community centres and clubs – paired with scheduled shared moments such as lunchtime or interest-based sessions. The measure would not be desk occupancy but whether people who would otherwise spend the week alone have a reason to be somewhere. This sits

close enough to micro-activation zones in underused public space to be tested in the same way.

Trusted people in trusted places

Placing trusted people, such as library staff, service navigators and trained volunteers, where residents already go to help with access to services, forms, and digital transactions. Volunteers and students can be trained as local digital helpers. This is the pop-up city connector over a longer timeframe and at a larger scale, and the same caution applies: technology should broaden what the person can help with, and the additional work should be resourced rather than added to existing roles.

A human pathway through every service

The most immediately usable idea is a stated escalation sequence for any public-facing service.

Human escalation

Self-service, for people who can complete the task themselves.

Virtual assistance, where a guided or automated layer can help.

Local human assistance, in a place the person can reach.

Expert escalation, where the question needs specialist knowledge.

This gives practical shape to the report's requirement that people can recover when a digital layer fails, and that nobody is left inside an

automated process without a way out. It could be adopted as a design rule for the trials without waiting for a wider program.

Measuring participation without watching people

Measuring participation, social connection, wellbeing, trust and inclusion can occur without extensive personal surveillance. That is consistent with sensing conditions rather than people. How such measures could be collected without identifying individuals is unresolved and would need to be settled before any trial depended on them.

Country, story and place

Expressing local language, pathways, waterways and ecological knowledge through the places themselves, and recording and sustaining that knowledge with Elders and First Nations organisations.

The report's position is that where Country, culture or local knowledge form part of an idea, co-design shapes the intervention from the beginning. Ideas of this kind should be developed with First Nations custodians rather than settled before that conversation begins.

Standards worth testing against

Several international standards address the social and governance dimensions of smart cities rather than the technology and would be a reasonable reference for later program design.

STANDARD	RELEVANCE
ISO 37101	Sustainable development in communities: inclusiveness, quality of life and governance
ISO 37106	Guidance on smart city operating models, citizen engagement and scaling local initiatives
ISO 37120	Indicators for city services and quality of life
ISO 37122	Indicators for smart cities, including digital inclusion measures
ISO 37123	Indicators for resilient cities, including social resilience
ITU U4SSC	Key performance indicators for people-centred cities: access to services, inclusion and participation
IEC SRD 63233	Inventory and mapping of smart city standards. Part 1 sets the method. Part 2 is the catalogue