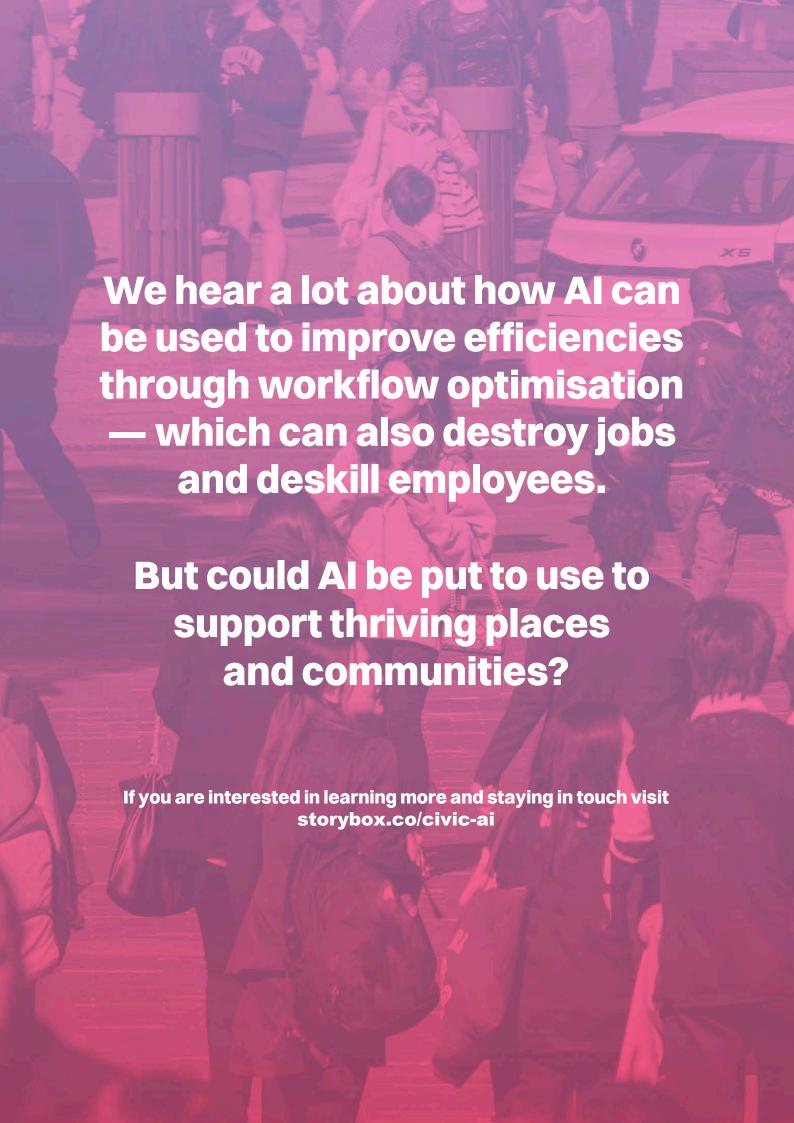


CAN CIVIC AI HELP CREATE STRONGER COMMUNITIES?

White Paper

2025



Putting AI to use for better communities and habitats

For many years, we've heard of the risks to jobs as AI tools are introduced into workplaces, far exceeding what humble humans are capable of. But of course, this only tells a part of the story.

One of the greatest traits we have as humans is our ability to imagine and conjure new ideas, to connect and synthesise different perspectives, and work collaboratively with each other in pursuit of common goals.

Far from replacing us, many emerging AI tools can empower and equip us to collaborate in new ways, unlocking new community value.

Of course, AI has many troubling uses as well. Anything humans can do now, AI will accelerate. This is why aligning the adoption of AI with clear values and ethical intentions is critical.

Building vibrant citizen spaces
- spaces for conversation,
creativity and dialogue - is a
huge opportunity area for the
adoption of AI across public and
civil society organisations.

Beyond the marketing hype

Much of the marketing around AI is focused on addressing problem areas like workplace efficiency, through time and cost savings.

While improving efficiency is always valuable, there are wider metrics of success guiding the work of public organisations and institutions. Promoting and facilitating citizen engagement, understanding community sentiment, and

building strong social and community capital are key investment areas.

How, then, can AI tools and workflows be used to accelerate the impact of public investments in building stronger communities?

Let's explore some potential applications of AI to nurture positive impacts in communities.

ABOUT STUDIO ESEM & STORYBOX.CO

Studio ESEM uses technology and creativity to promote positive impacts in communities. Through the STORYBOX platform, we are leveraging the power of digital technology, public space media and AI to foster stronger citizen engagement and community insights about places and habitats.



Image: A render of a future Dulwich Hill in Sydney's inner west created in Midjourney.



Opportunity Area 1: Public art and placemaking

Studio ESEM projection design of Birrunga Wiradyuri's paintings with community lantern parade. Bathurst Winter Festival 2024.

Many local governments today invest in public art and placemaking programs to support communities, promoting economic revitalisation, community resilience, and health and wellbeing outcomes.

But we know from direct experience that many placemaking programs face challenges when required to quantify and measure the impacts of these programs over time.

The value of public art can be notoriously hard to quantify in economic terms. Oftentimes, anecdotal evidence is procured through expensive community surveys, while hard metrics of value are limited to consumer spending figures.

During times of budget pressure, these programs can easily be cut, because their value has not been clearly captured. Initiatives such as the

'Percent for Art' scheme have helped mandate public art investments in new development projects. They provide a framework to help incentivise investment in exchange for favourable development approvals.

But many advocates of public art and placemaking programs still struggle to measure the value of public art and placemaking, leading to uncertain sources of funding.

How might AI help?

Using AI workflow and training methodologies, we are starting to address the age-old problem of trying to 'quantify the qualitative'. This is guiding a new framework for valuing public art and placemaking and its impact on community wellbeing.

At Studio ESEM, we are creating an open source 'Ambient Commons' methodology that builds on existing evidence relating to the value of art on mental health, and the value of creative placemaking on identity and belonging, to build a new diagnostic model for place-based cultural value.

This framework uses AI tools to implement workflows for data capture, analysis and reporting, linking real-time activity monitoring analytics with core attributes of cultural value attached to the experience of public art in public spaces.

In this way, we can more easily capture quantitative measures like reach, engagement and sentiment in ways that are far less costly and time consuming than traditional surveys.

What's more, each activation and public art program becomes an opportunity to improve the depth of data and insights relating to the value of culture and connection in public spaces.

This creates a 'win-win' situation: Investing in public and creative activations and programs

is also an opportunity to not only engage and delight communities, but also improve how we use data and insights to measure value and impact over time.

Far from destroying communities and creativity, Alsupported tools can advance the ways we value public art and placemaking to create a sense of belonging and identity over time.

> View the case study: STORYBOX Canberra and the power of public space media at https://storybox.co/canberra-case-study



Images: STORYBOX on location in Canberra, 2022 featuring films from the National Film and Sound Archive. Images by Studio ESEM (formerly ESEM Projects).





Opportunity Area 2: Citizen Engagement

Far too often, failure to invest in community engagement and sentiment analysis can lead to poor policy and investment outcomes.

This is especially the case when it comes to technology and smart city investments, where low levels of trust and community sentiment can result in costly mistakes and negative publicity. The experience of Darwin City Council through its 'Switching on Darwin' program in 2019 is an instructive example.

But understanding and measuring community sentiment can be time intensive, and expensive. When citizens and communities feel their voices are not being heard, this also creates further challenges for local governments and place managers, impacting the quality and outcomes of the consultation process.

Major policy agendas, including the delivery of affordable housing, the transition to renewable energy, and disaster resilience planning, can become slow moving and mired in controversy when community consultation efforts break down or are delayed.

And while local communities are always important stakeholders in the delivery of place-based transformation, they are not the only stakeholders whose views need to be taken into account.

Balancing the needs of current communities with future generations of inhabitants - both human and nature-based - is critical to the work of successful long-term place transformation projects.

Is there a way for AI-informed workflows and tools to improve the integration of citizen and community perspectives into decisionmaking?

'Civic AI' is an emerging field of citizen engagement that utilises AI tools and capabilities to enhance and extend existing citizen engagement models.

In places like the Liverpool, UK, Civic AI is being adopted as a way to engage citizens in building important data-driven insights and applications to support place-based social care.



STORYBOX Totem for local citizen insights (Artist impression).

Created by Studio ESEM, 2025

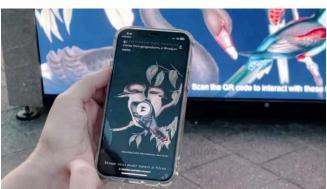
This approach enables a 'connected city' approach to community health care, enabling citizens, data scientists and researchers, and health care professionals to work together to explore new models of care in community settings.

While still in its infancy, Civic AI opens up all kinds of new possibilities for civic engagement at the local level.

Potential areas of Civic AI currently being explored and tested in different locations around the world include:

- Improved multilingual engagement, using Natural language processing (NLP) techniques
- Design of real-time sentiment analysis frameworks for understanding community preferences and how they change over time, and how they differ in different locations
- Real-time visualisation of community perspectives and inputs
- Creation of citizen-led AI agents, authorised by citizens to represent their views, their data, or their preferences in test decision-making contexts. These agents or 'civic stewards' are licensed for inclusion in deliberative decision making contexts in a time-bound way, and subject to final confirmation and reviews by their 'owners'.





Above: STORYBOX Moodring interactive tool. Below: Educational mobile interactive for The Australian Museum.



STORYBOX Moodring on location at the Australian National Maritime Museum. The sentiment tool helps gather insights about citizens' care for local waterways.

Opportunity Area 3: Nature Care

Citizen science has proven to be a powerful way for scientists to partner with citizens to improve data collection and insight about environments, habitats and threatened species.

Civic AI can take citizen science even further – expanding the range of data citizens can elect to share and collect, in service of healthier habitats for all living creatures.

In Australia, the Australian Museum's Frog ID program enables citizens on the ground to collect and share data via a mobile app, providing location-based insights on the distribution of frogs across Australia. Launched in 2017, Frog ID has attracted over 45,000 citizen users across Australia, with over 250,000 'validated' frog identifiers contributing to amphibian research and conservation efforts across Australia. With data obtained through FrogID, museum scientists are able to track the invasive Cane Toad, while also understanding where frogs are thriving and where they aren't, and how they're responding to a changing environment.

Another successful citizen science app developed in the US, eBird, has evolved over the past decade to now support machine-learning and predictive algorithms that can visualise how development projects may impact species distribution over time. Likewise, the 'Eye on the Reef' program encourages visitors to the Great Barrier Reef Marine Park help monitor and assess the reef's health. That means citizen-led data is now training advanced algorithms for conservation and care of biodiverse habitats.

And as the capabilities of AI evolve, predictive analytics can also be used to help target where new data is needed, inviting citizens via alerts and incentives to contribute data at critical times of need. These examples show that when citizens 'opt-in' and elect their data for positive causes, the results can be transformative.

Citizen science apps like Frog ID and eBird are success stories from the world of science, but what does this have to do with placemaking and urban change?

In the early 2010s Australian civic technology platforms like Snap Send Solve and Sydney's Bang the Table leveraged the power of technology to better integrate citizen views into planning frameworks.



Image source: iStock

A new generation of citizen engagement platforms like Social Pinpoint and CoverLens now equip governments to capture sentiment on key policy topics, infrastructure planning decisions and more.

But even more can be done using new generation Al technology.

As Australian-based Coverlens shows, public consultations can now be undertaken more often and more frequently, with data usage remaining secure and compliant with local legislation. Rich, real-time insights are now readily available via natural language processing (NLP) capabilities, translating raw data into actionable insights to support decision-making.

But ultimately, the impact that community voices can have is limited by the extent to which decision-makers are required to listen. If community consultation programs are simply to 'tick a box', no amount of technology will help to amplify community voices.

But what technology can do is extend the range of voices and perspectives shared during consultation programs, and elevate the visibility of community sentiment in ways that keep decision-makers accountable to the communities they serve.

How might AI help?

Citizen engagement is often focused around major infrastructure spending decisions, which stand to impact the lives of people in significant ways. As a consequence, citizen engagement can often unearth negative emotions and 'NIMBY' perspectives towards disruption and change.

But what if citizen conversations could be more actively embedded into the fabric of public spaces? And how might AI help to integrate these conversations into qualitative and quantitative insights useful to planners and decision-makers?

Using today's tools, there is no reason why a realtime 'dashboard' couldn't be established in public spaces to nurture public conversations on local topics, and ideas that inspire connections between people and places.

Taking this idea further, citizens could be enlisted at key times to support the collection of data insights on key topics, perhaps in exchange for local vouchers or rates discounts. Citizens might agree to share ambient location data their phones collect on local air quality, noise pollution, temperatures or even their level of social connectivity in the community.

This model takes the citizen science model to support future placemaking – improving opportunities for meaningful dialogue between citizens and place custodians.

Imagine a future when citizens agree for their own personal avatar to represent them at (digital) Town Hall meetings, extending the range of people equipped to contribute to these important community forums.



Image source: iStock



Opportunity Area 4: From outdoor media to public space media

STORYBOX by Studio ESEM at Darling Harbour as part of AGNSW's Cao Fei exhibition, January 2025.

Many of us find large digital advertising screens in public spaces something of an annoyance, but we put up with them. In previous eras, 'No Bill Posters' signs were common around cities, declaring no-go zones for promoters and advertisers. But in today's digitally-intensive cities, building owners can sell access to their physical real estate to advertisers, in exchange for high-volume visibility and exposure.

Outdoor media companies like Ooh! Media and JCDecaux, as well as more recent entrants like QMS Media, have built innovative digital businesses that integrate audience data and insights to build 'programmatic' campaigns for advertisers based on location, time of day, events and even the weather.

Digital advertisers are well funded to invest in advanced place-based insights and analytics developed through initiatives such as MOVE (Measures of Outdoor Visibility and Exposure method from Australia's Outdoor Media Association), DSpark Mobility Data, Nielsen Consumer & Media View and RDA geoTribes Explorer.

With the roll-out of digital LED screens each advertising 'slot' in the city – billboards on the walls – could be rotated with multiple campaigns. Asset owners were able to expand their footprint into improved metrics around awareness and attention, beyond basic footfall and reach statistics, helping marketing agencies better report on their return on investment (ROI) and 'cost per mile' per advertising spend.

The business model that sees data insights about people and places translated into advertising dollars is not serving the quality of our public spaces. We need different points of data value to guide and nurture digital investments that lead to high quality experiences in vibrant public spaces.

For city leaders, policy makers and place managers, relying on advertising dollars alone can lead to unfortunate consequences, like an advertisement for fast food being placed next to a high school, when efforts are underway to encourage healthy eating as a way to reduce long term pressures on Australia's health budget. And while the 'out of home' (OOH) ad sector may choose to 'donate' screen time to positive causes in the community, but the availability of slots is highly variable and subject to (low) demand from paying advertisers.





Diversified UNSW on STORYBOX at Sydney's Custom Square. Image by Studio ESEM.



Image source: iStock

Could AI help us find a better way?

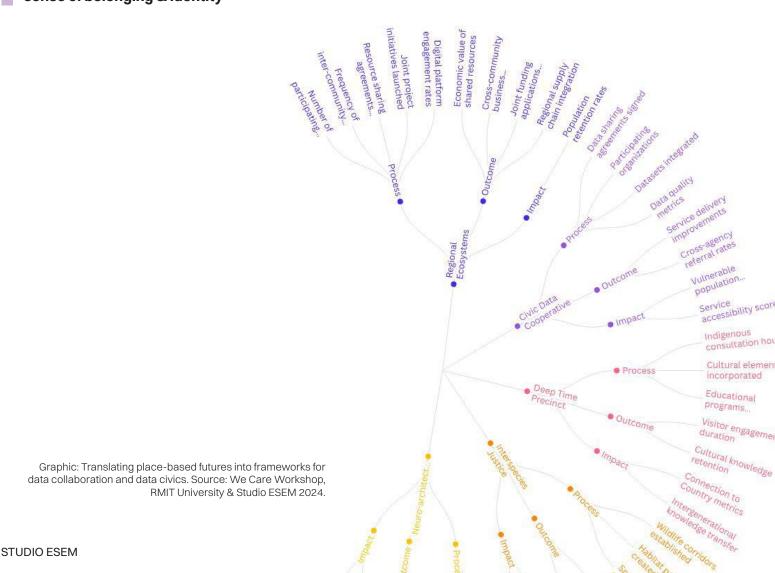
Using AI tools and novel methodologies for data value, public space media platforms like STORYBOX are leveraging the power of place-based media to help design for-purpose campaigns and creative partnerships.

STORYBOX integrates place-based data insights with permission-based community sentiments to enable arts, sustainability and museum partners leverage the power of public space exposure to support their audience engagement.

The Ambient Commons methodology adapts existing ambient measurement tools towards public value goals, addressing the role of public space media in enhancing a sense of belonging & identity

With robust impact data, partners can work with STORYBOX to design public interest campaigns focused around creativity and community wellbeing.

With over 50 cultural and creative partnerships since 2020, STORYBOX shows what's possible when civic and community value is prioritised in the design of a digital engagement solution.



Conclusion

There are lots of opportunities right now to embed AI tools and workflows in ways that can benefit citizens and communities in diverse habitats and places.

While we may face many negative consequences from AI – including potential job losses, data breaches, environmental hazards and more – we should not ignore opportunities to elevate and extend the power of citizens and community conversations in shaping future places.

Designing cities purely for speed and efficiency, and maximum economic growth, fails many of us, including not just humans but also the lives of many other species, whose needs and habitats continue to be undervalued.

But, with AI tools, we are starting to build much more complex, evidence-based frameworks around the value of 'soft' infrastructure, and more qualitative values of place.

Many of these ideas and opportunities are still in their early infancy. Likewise, internal policies for the adoption of AI in workplaces are still in development.

Implementing these novel frameworks will require an innovation mindset that champions and evidences the benefit of small scale pilots to test community sentiment and evaluate outcomes.

But it is vital that we test and examine how core values of place - including the importance of citizen engagement, local democracy, community resilience and place-based regeneration - can be used to shape the future applications of AI. Let's work together to imagine better.

Interested to learn more?

Register to join a Civic Al masterclass

For information and how to register visit:

storybox.co/civic-ai

References & Further Reading

For more information and further reading go to **storybox.co/civic-ai**.

Acknowledgements

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