



Image credit: Tim Pascoe, Transport for NSW

Background

The NSW Government is looking for leading edge technology and data solutions for place-based problems that matter to the people of NSW. Through the Smart City Innovation Challenge program, the NSW Government works with the emerging technology sector to co-design and invest in solutions that will deliver better outcomes for communities, places and people.

We have launched three successful Challenges and are integrating our key findings into our fourth challenge, which focuses on the data and technology solutions we need to support innovation on a broader scale.

Our challenge process outlines priorities for solutions, provides feedback early, and fosters a low-risk partnership approach between Government and partners. This process allows participants to build, test and commercialise products to support smarter places across NSW.

Challenge statement

How might place-based data sharing and analytics support vibrancy across NSW?

Overview of the problem

Place-based data sharing and visualisation will benefit people and places

Combining different datasets and visualising them at precinct level helps us develop insights to better understand our public spaces. We've released over 200 datasets as open data, but we know there's a richer picture to be built together. We're reaching out to the market to see how this can be done. Solving this challenge will help us to understand how places function, how we can support them, and for us to evaluate our success and impact in place-based initiatives.

Bringing together datasets from different players doesn't just benefit the end user – it also benefits those who need data for their decisions, for developing innovative technologies, and those who need to evaluate policies and programs. It also supports all stakeholders in a particular place to work through the simplest, most fit-for-purpose approach to place-based data sharing while getting feedback on the market value and audience for different datasets. This includes third parties, the NSW Government, councils, and others who might not be able to realise the potential value of data they hold until a group of placemakers, innovators, and policymakers come together to think about what datasets might support different metrics and insights.

Data analytics will drive vibrant day and night-time economies across NSW

The NSW Government is supporting a thriving and vibrant night-time economy and revitalising our streets and spaces after the COVID-19 pandemic. Legislation has been introduced in NSW Parliament that aims to remove unnecessary regulation, support creative job growth, put in place common-sense approaches to liquor licensing and sound management, and activate outdoor spaces. Data is essential: understanding how places function, what makes a place vibrant, and how people spend time and move through a place are all questions the NSW Government will be asking in order to monitor and evaluate the vibrancy reforms.

As an example, the vibrancy reforms incentivise councils to establish Special Entertainment Precincts, which are defined areas that support live music and performance. Councils can determine if they want to establish a Special Entertainment Precinct in their area based on both their local business and community needs and wants. A special entertainment precinct in Enmore in Sydney's inner west will look different to a precinct in Parramatta, Wagga Wagga, Byron Bay or Tamworth.

The NSW creative sector contributes more than \$120 billion to the NSW economy. In Greater Sydney, latest research shows that 12 per cent of the workforce is engaged in creative industries.¹

Vibrancy includes not just businesses, visitor numbers, and movement across a precinct. The surrounding elements that make a place vibrant include safety, transport, and cultural activities and experiences. As an example, the outdoor dining rules introduced during COVID have been very popular with venues and the community. Councils might want to understand impacts to local business investment, tourism, travel patterns (active or public transport, private vehicles), and the impact on public health and safety.

Outside the Sydney CBD, just 23 per cent of respondents to a Department of Customer Service survey felt they had good-quality night-time entertainment options in their area. That figure was as low as 18 per cent when people were asked about good-quality arts and cultural events in their area outside the CBD after dark.

¹ 2021 Census of Population and Housing, <https://www.abs.gov.au/statistics/people/housing/housing-census/latest-release>

Challenge summary

We are looking for solutions that **leverage** place-based data sharing to deliver value for our identified vibrancy precincts. The NSW Government will explore opportunities to support reciprocal data sharing between different partners. We are seeking **tech innovators** to work with industry partners to propose solutions that can give us detailed insights into vibrancy in our precincts.

Insights that solutions could target include:

- how people move between restaurants, bars and entertainment venues
- connectedness between businesses and attractions, and the impact of this on spend and movement
- the impact and value of different types of activation, e.g. ground-floor, street dining
- ease of access to places or events for different groups and demographics, including drop off (kiss and ride), and parking options
- access to reliable and safe transport to get around, especially late at night.

Data and tech innovators should work with industry partners when preparing their submission to ensure that diverse datasets are tested through the Challenge process. Transport for NSW will work with State and Local Government partners to identify Government datasets for the Challenge.

Examples of insights that can help build a picture of our places

Insights	How can different data users use this data?
Spending patterns and frequency – to provide data on visit times, spending habits and types of establishments visited.	Access to insights on how people are spending can help businesses make investment decisions by identifying who is visiting, why, and where they are coming from.
How different types or groups of people travel into, move around and dwell within precincts based on their purpose of visit.	NSW Government and local councils can use this data to help inform policies to meet the needs of the community and make local and state wide travel-related investment decisions.

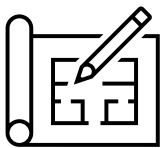
We challenge you to think through the value and power of individual and collective datasets in placemaking and innovation.

Benefits of a solution

Improving access to different datasets: We want to foster a collaborative culture where different users and dataset owners feel they can share their insights. This will encourage partnership opportunities between the state and local government, businesses and community organisations for better place outcomes.

Engaging the community: We want to see people exploring their neighbourhoods and visiting different locations across NSW. More visitors mean more vibrant communities, and better sharing of data will help community members better understand the needs of their community and feel informed.

Who are we solving for?



Persona 1 – Alex, NSW Government

Alex is a strategic planner who works at Transport for NSW. They are focused on making sure public transport links like stations and stops serve the surrounding precincts. They want to make sure their decisions are data-driven and that initiatives can be evaluated using real data on movement, business activity, and transport patterns.

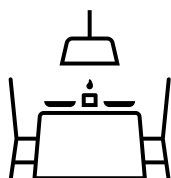
Current pain points: Alex wonders if there are opportunities to create a richer picture of how places are experienced and how they are functioning. Alex is keen to use data to measure new things, like the vibrancy and experience of a particular area. Alex has tried two-way data sharing in the past, but has found the process lengthy and complicated, negotiating pricing, access and governance anew each time.



Persona 2 – Rakesh, Local Government

Rakesh works for City of Parramatta Council and wants to provide better services for the community and visitors. Parramatta's CBD is the first Purple Flag accredited precinct in Australia. Rakesh wants to support outdoor dining, street closures and other place activation activities to support Parramatta as an entertainment destination.

Current pain points: Rakesh knows that Parramatta CBD is growing, with opportunities arising from new infrastructure and an increasing population but he can't put the data together to show the impact. He's had a few conversations with private data holders who have insights on how people are spending money and visiting businesses in the area, but he's not sure how this data could be accessed and used by Government.



Persona 3 – Ling, local restaurant owner

Ling owns a restaurant near a music venue in Enmore. After COVID-19 drove down customer numbers through 2020-2022, she has noticed more people attending events and sees an opportunity to increase her opening hours. She is struggling to do the numbers for the additional costs involved based on how people move around the precinct.

Current pain points: Ling can gather data on her customers based on online booking numbers and estimate the number of walk-ins, but she wants to know how many walk-ins to expect in a night, spending and movement patterns in the area, and how different visitation patterns for business across the precinct might shape future plans. Ling could really benefit from connecting with other businesses in the area.



Persona 4 – Bruce, commercial landholder and developer

Bruce is working on the redevelopment of a commercial complex, housing several buildings with offices and some ground floor space that could support hospitality and/or retail activation. Bruce feels sure there must be data showing the value of vibrant, lively cultural activities, music, and restaurants in a precinct.

Current pain points: Encouraging his partners to bring in retail and 'going out' destinations to activate the precinct will depend on data to show the benefits outweigh the cost of investment. It's also critical to both bring in, and deliver value to, the businesses that could come into the development. He doesn't know where to start looking for these datasets.

Solution requirements

Locations

Solutions must include one or more of the below locations:

Initiative	Locations
<u>Purple Flag</u>	<ul style="list-style-type: none">• YCK (York, Clarence and Kent Streets) in Sydney's CBD• Church Street, Parramatta• Haldon Street, Lakemba• Illawarra Road, Marrickville
<u>Uptown Precincts</u>	<ul style="list-style-type: none">• The Gathering, Blacktown City Council• Ujjala Little India, City of Parramatta• Eastwood KoreaTown, City of Ryde• 2077 AD Hornsby After Dark, Hornsby Shire Council• Balmain Rozelle, Inner West Council• Brookvale Arts District and Freshwater, Northern Beaches Council• Paddo Collective, Woollahra Municipal Council• Chippendale Collective, EDDY, Green², Haymarket Precinct, HQ Sydney, Kings Cross Quarter, New Sydney Waterfront, Pyrmont+Ultimo24/7, Rainbow Precinct, Stanley Street, UpTown Sydney CBD, Walsh Bay Arts Precinct and YCK Laneways, City of Sydney
<u>Special Entertainment Precincts</u>	<ul style="list-style-type: none">• Enmore Road, Enmore

Solutions should consider different precinct types, and incorporate core and additional functions that might support different demographics, activities, and objectives to support future application across NSW.

Technical Requirements

Participants should consider the following core principles:

- Ability to manage and maintain data contributed on an ongoing basis to a high quality
- Usability and accessibility, including different use cases and capabilities across varied stakeholders
- Leverages emergent technologies (e.g. AI) and smart, connected technologies (e.g. sensors)
- Community-driven insights and decision-making
- Improves customer experience through the consideration of different visualisation options
- Solution is viable for longer-term, and where applicable, larger scale (state-wide) use
- Future sharing options for data, including public and/or accredited government and industry partners

Interoperability Requirements

NSW Government is open to proposals that would seek to use government data platforms to support the development of precinct insights. If seeking to access NSW Government platforms, participants will need to provide standardised datasets and security-tested APIs for ingestion and demonstrate cybersecurity and privacy controls in place to confirm viability as a data sharing partner.

Relevant Government guidelines

Participants must review the Smart City Innovation Challenge Guidelines provided in the tender package and available on our [website](#). All solutions must be eligible for funding under the [Smart Places Acceleration Program Guidelines](#) and the [Digital Restart Guidelines](#) to be considered for the Innovation Challenge.