



Australian Government
**Department of Industry,
Innovation and Science**

University Precincts – Issues Paper

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Prepared by the Department of Industry,
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Precincts Advisory Committee

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Consultation on the need for a National University Precincts Strategy

The purpose of this paper is to guide discussion and seek views on whether there is a need for a national university precincts strategy. If there is a need for a national strategy, we are seeking views on what a strategy would include and how would it operate. The aim would be to drive higher levels of innovation, collaboration between businesses and research communities, business growth, and economic growth.

This consultation forms a targeted element of [Innovation and Science Australia's](#) work in developing a 2030 strategic plan for Australia's innovation, science and research system.

Greater collaboration supports economic growth

The OECD estimates that as much as 50 per cent of economic growth in developed countries can be accounted for by innovation activity, and that this contribution will grow.¹

Australia has internationally competitive industries and strong scientific capability. Our universities and research institutions generate world leading research and knowledge and are underpinned by significant public investment. Given these strengths and noting the findings of the '[Performance Review of the Australian Innovation, Science and Research System 2016](#)', there are significant opportunities for Australia to better link industry with research and translate research and knowledge production to commercial outcomes and increase the levels of innovation. There are many areas where this is already being done successfully and these collaborative endeavours can be built upon.

Stronger industry-university engagement will increase collaboration

Evidence on university precincts both domestically and internationally shows that they can create higher levels of innovation, collaboration between businesses and research communities, business growth, and economic growth.

There is significant activity underway to facilitate collaboration at the Commonwealth and state/territory level. At the Commonwealth level this includes the [Industry Growth Centres Initiative](#), [Entrepreneurs Programme](#), the [Australian Research Council \(ARC\) Industrial Transformation Research Program \(ITRP\)](#), and the [Cooperative Research Centres Program](#).

Universities have indicated that they are undertaking significant activity to increase interaction with business.

The Government has established an advisory committee to provide advice on whether a national university precincts strategy is needed and if so, what, if any, Government involvement might be required. A strategy could potentially assist with bringing people together to discuss good practice in precinct development and to build stronger industry and university networks, locally, nationally and internationally. Existing Growth Centres could, in their role as a national network for collaboration, take a key role in linking precincts and connecting industry to research and technical expertise to solve challenges.

¹ OECD (2015) *The OECD Innovation Strategy 2015*, OECD Publishing

The University Precincts Advisory Committee is chaired by Dr Charles Day (CEO, [Office of Innovation and Science Australia](#)) and includes representatives from universities and industry. The Advisory Committee is expected to advise the Government late in 2017.

Throughout the year, the Committee's advice will be informed by:

- A stocktake of existing and planned precinct activities;
- Understanding the role of existing Commonwealth state, and local government measures in supporting precinct formation and growth;
- International and domestic case studies of exemplar clusters.

Precincts, Districts and Technology Parks facilitate collaboration

The terms "Innovation Precincts", "Innovation Districts", and "Technology Parks" are used in various contexts to describe forms of geographic clustering of knowledge-based activity. Whilst it is almost impossible to define a single typology, common features typically fall under three sets of criteria:

- A widely understood geographic extent (even though boundaries are often fuzzy),
- A shared sense of identity amongst those involved, and
- A strong set of formal and informal networks and partnerships between people and business, research, education and training and government.

For the purposes of this paper, we will use the single term "precincts" to encompass all of these variations. We further note that our interpretation of the term "University Precinct" implies a significant role for a university in the economic activity of the local region and life of the precinct, rather than necessarily indicating that the precinct is geographically centred on a university campus.

From an economic perspective, the key driver in the formation of precincts is that entrepreneurs, firms and researchers benefit from locating near each other (often described by 'agglomeration economics' linked to the idea of economies of scale and network effects), which is an extensively-studied phenomenon in the economic development literature. From this angle, precincts are agglomerations of entrepreneurs, jobs, capital and innovation that stimulate new and higher levels of connectivity, idea sharing, collaboration, and innovation, which produces benefits for the broader economy.

For the national innovation system, precincts offer a fertile environment for the emergence of high-growth firms, as well as a highly-networked environment in which people can collaborate and build partnerships across industry, universities and the community. These are key priorities for the further development of Australia's Innovation System, which is currently the subject of a strategy development process by Innovation and Science Australia.

University and Innovation Precincts, Innovation Districts and Technology Parks have already formed across Australia. Of late, a greater emphasis has been put on place and on the amenity of precincts for entrepreneurs, the workforce and residents, as well as how to best leverage regional strengths and assets to drive linkages between participants. Brookings describes this in its 'Rise of Innovation Districts'.² In international terms, the emphasis on

² Bruce Katz and Julie Wagner (2014), [The rise of Innovation Districts: A New Geography of Innovation in America](#)

amenity should play to Australia's strengths, given that many of its cities rank highly on international metrics of liveability.

Precincts have formed in inner city, suburban and regional settings. While each precinct is unique, they improve business access to talent, encourage entrepreneurship, and help link business to researchers to solve industry problems.

Local leadership is a key success factor to allow precincts to harness and build upon competitive strengths. Strengths can be a combination of local research and education institutions and firms, physical assets and infrastructure (including public transportation, shared work and lab spaces and community spaces), and community connectedness (e.g. established social capital and local communities of practice). Local leadership can also prioritise seeking support from available federal, state and local government programs (such as infrastructure projects, regional and urban development initiatives and industry and innovation policies).

Universities benefit by engaging with industry

For the research sector, closer collaboration with industry through precincts can offer:

- Challenging problems to solve, which can act as a stimulus for research programs.
- A high-trust environment in which personal connections between researchers, entrepreneurs, and businesses can be built into long-term strategic collaborative relationships (as opposed to one-off narrowly defined engagements).
- Employment and work integrated learning opportunities for students, including PhD students and post-doctoral researchers.
- A receptive and entrepreneurial community for commercialisation that provides access to development, engineering, manufacturing and marketing expertise.
- Funding to carry out research.

Universities offer key capabilities for business

For industry, partnering with universities through precincts can offer:

- Access to highly talented people with expert knowledge and skills, particularly skilled graduates and PhD students, both as collaborators and as potential recruits
- A high-trust environment in which personal connections between researchers, start-ups and businesses can be built into long-term strategic partnerships.
- Connections to local, national and international networks of researchers and other professionals.
- Access to specialised scientific equipment, infrastructure and research capability.
- Streamlined access to technology, patents, and emerging research findings.

Precincts can help people, businesses and researchers connect

Firms and researchers expend significant energy seeking each other out, and the close proximity of precincts provide greater opportunities to form deep and trusting relationships between businesses, researchers, educators and the community. University and innovation precincts may provide both formal mechanisms (e.g. hackathons, events and network organisations) and informal opportunities for people to meet through chance interactions. These help people meet; to share ideas, challenges and opportunities; and to access talent,

knowledge and capability. Precincts may also drive policies to facilitate firm use of research infrastructure.

Precincts can therefore make it easier for people to connect, firms to find researchers and access knowledge, and researchers to find businesses, to collaborate and solve problems in a high-trust environment.

Precincts address local challenges and opportunities, and each precinct is different. A range of policies internationally have facilitated both collaboration and precinct development.

International policy and programs

Many international jurisdictions facilitate research and industry collaborating through clusters and precincts. Some key principles demonstrated by international programs such as the [Carnot Institutes Network \(France\)](#), [Leading Edge Clusters \(Germany\)](#) and [Enterprise Zones \(Great Britain\)](#) include:

- Improved transparency and highlighting to industry the public and private research facilitates and capabilities available nationally. This may include marketing research institutes that demonstrate science excellence and a willingness to work with industry.
- Highlighting success to drive cultural change.
- A flexible approach and partnerships between industry, research, skills and government to drive applied research, facilitate industry standards development and for developing education and training.
- Cluster to cluster collaboration, and attracting greater foreign investment.

In [UK City Deals](#), universities and research organisations can be recognised as anchor institutions. City Deals can provide funding for infrastructure (including incubators, accelerators and spaces to bring researchers and business together) when that investment is part of a broader vision for regional development. The UK government provides funding subject to leveraging significant private sector money and the region meeting required outcomes. One benefit of this approach is that when packaged in the context of regional development, innovation is seen as a positive.

States, territories and local governments all have a role to play

All three levels of government in Australia (Commonwealth, state and local) have a role to play in supporting the formation and growth of university precincts:

- The **Commonwealth Government** has responsibilities for university funding, for basic research funding, and for a range of innovation and business capability programs. It also oversees major research agencies (e.g. CSIRO and the Australian Nuclear Science and Technology Organisation) and funds research infrastructure that can be key players in precincts. The Commonwealth Government also attracts foreign investment, which can contribute to precinct development.
- **State & Territory Governments** have an important role in precincts.
 - State governments have a range of industry, innovation and science policy and programs that are tailored to each states' strategic priorities.
 - Investment is key to precinct development and state governments are active in investment attraction (especially internationally), and can also play a role in the provision of direct (e.g. buildings) and supporting (e.g. transit links) infrastructure.

- For health precincts in particular, state government roles in hospital funding and planning are also key considerations.
- Many universities are situated on Crown land. State and territory governments have jurisdiction over Crown land and there are restrictions for universities on how this land can be developed and used.
 - **Local Governments** are increasingly sophisticated in matching urban planning decisions with the needs of emerging precincts to increase amenity, and can also contribute through community and business engagement initiatives.

Commonwealth Government is making many foundational investments

The National Innovation and Science Agenda is delivering initiatives to support innovation and science, across the full spectrum of science education and engagement, research and research infrastructure, translation and commercialisation. 2017 reforms to research block grant funding for universities provides increased incentives for industry and end-user engagement, and also provide universities with increased flexibility to support research.

The Commonwealth Government works in partnership with state and territory governments through a range of mechanisms, including through [City Deals](#), regional development programs and structural adjustment initiatives.

State and Territory Governments are creating the enabling environment

The states support and facilitate collaboration between businesses and the research sector, and between businesses, through programs, such as *NSW Boosting Business and Innovation* and the Queensland Government's *Advance Queensland* suite of initiatives, and through financial support such as the South Australian Government's purchase of the former Mitsubishi Motor's site in Adelaide to develop the Tonsley precinct.

Land Tenure in Western Australia

The Western Australian Government has released new land to enable the development of the Murdoch Health and Knowledge Precinct adjacent to Fiona Stanley Hospital, St John of God Hospital, Murdoch University and South Metropolitan TAFE.

In addition, the WA Government has approved changes to land tenure to enable Murdoch University to create a new mixed use campus development, the Eastern Precinct, on undeveloped university land. The Eastern Precinct, which will expand the University's research activities and education programs, is being developed in consultation with local and state governments to complement the Murdoch Health and Knowledge Precinct.

Local Governments are providing a valuable leadership role

Local governments play a role in precinct development, through land use planning and economic development strategies. For example, the City of Melbourne is working with RMIT and the University of Melbourne to develop the knowledge precinct directly to the north of the CBD. The City of Greater Geelong works with the Geelong Manufacturing Council and Deakin University by providing complementary services to firms, by co-sponsoring networking events, and by promoting the region as an innovative manufacturing centre.

Does Australia need a national strategy?

Greater development of, and better linkages between, precincts can be supported by getting the incentives right and bringing the right parties together. For example, the Australian Government is already implementing reforms to better incentivise industry research collaboration.

The federal, state and local governments, businesses, universities and research institutions administer a range of innovation, collaboration, education and training and regional initiatives that affect precinct development. In Australia, few initiatives (particularly Australian Government initiatives) consider location, with the exception of place-based policies such as [City Deals](#), regional development programs, including [Regional Jobs and Investment Packages](#) and the [Regional Growth Fund](#), structural adjustment programs such as the Geelong Region Innovation and Investment Fund, and place-based research programs such as the [Advanced Health Research and Translation Centres](#).

There may be opportunities to better coordinate these activities and precinct development through a strategy.

To facilitate discussions, it may be helpful to offer one suggestion about what a national strategy may include. There may, for example, be value in the Commonwealth doing more to frame a national narrative, and lead discussion, on precincts in Australia. This could involve:

- Using the convening authority of Government to bring relevant players together to strengthen a common agenda
- Leveraging complementary government programs (e.g. Growth Centres) to facilitate collaborative partnerships and projects between precincts.
- Highlighting the value and need of linked up government across federal, state and local jurisdictions, and example issues that could be considered from the perspective of precinct development.
- Demonstrating to the public how inputs into university precincts can benefit the economy, and the community.
- Promoting an image of Australia as an innovative economy and encourage international networks and investment in university precincts.
- Considering how traditional and knowledge infrastructure supports effective precincts.
- Case studies to share good practice with universities, business and governments.
- Disseminating learnings from domestic and international precinct development (success and failures)

A national strategy could also support Government policy agendas such as the [National Innovation and Science Agenda](#), the [Cities Agenda](#), and election commitments to develop precincts, and Industry Growth Centres in their role as a national collaboration network.

Finally, a precinct's development differs by maturity and by whether it is in a regional, urban or in an inner city location. Precinct development varies significantly across Australia within these segments. Any national strategy may need to be cognisant of these segments and variations.

Seeking your views on the need for a strategy

How do we encourage the growth of precincts such that they engage with wider groups of industry, entrepreneurial, start-up and community stakeholders?

- What is already happening in this space that could be highlighted?
- What is good practice in business and university engagement? Does this vary for CBD, urban and regional precincts?
- What are some exemplar precincts that could be highlighted as case studies?
- If the anchor tenant is a university, how do we encourage more business and community engagement?
 - What is the role for significant businesses in a precinct?
 - Is there a need for an independent facilitator?
 - What are the core skills needed for facilitators?
- What could encourage greater collaboration between precincts, both domestically and internationally?

Questions for industry and community partners currently involved in precincts:

- How did your relationship with the university develop?
- Why did you locate your business or organisation in a precinct?
 - Was it access to talent and capability? Or was it certain incentives?
 - If your business had pre-existing relationships, why was it necessary to move into the precinct?
- What are the short and long term benefits of locating in a precinct?

Would a more extensive network of precincts increase the ease with which firms and researchers find each other?

- Often businesses and researchers are unable to find suitable partners.
 - Is there a further role for the Commonwealth in assisting businesses and researchers connecting?
 - Can this be done through existing initiatives?

How could Australia align the work of the three levels of government in fostering precincts?

- What can be done to coordinate activity and limit duplication of effort?
- How well aligned are the levels of government in supporting precincts?
- How does traditional and knowledge infrastructure support effective precincts?
- Is there value in encouraging industry-research collaboration in regional and urban development initiatives?

Is a national university precincts strategy necessary?

- Given the current level of activity, what additional purpose would a strategy serve?
- What metrics for success would be applied?
- Would highlighting and marketing current precinct learnings and activity be of benefit?
- In lieu of developing a strategy, are there other, better ways for Australian precincts to learn from each other and leverage each other's capabilities?

Will success require new roles from the Commonwealth?

- What is the appropriate role for the Australian Government in university precinct development?
- Are there further ways that the Commonwealth can assist precinct development?