

Innovation Precinct Insights Guidance for innovation precincts

Planning a new innovation precinct

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Innovation Precincts Insights – Guidance for innovation precincts

Innovation precincts are a cluster of industry, research and education activity in a specific geographic area. Precinct members build partnerships and tap into knowledge to launch new entrepreneurial activity and start-ups, and help established businesses improve their competitiveness, productivity and innovative capacity.

It takes many years for an innovation precinct to develop into a sophisticated, richly networked hub. Innovation Precincts Insights provides best practice guidance to support Australian innovation precincts to form communities of practice and share their knowledge and experience.

This first Innovation Precincts Insights guide provides advice for innovation precinct managers, including from universities, economic development organisations, and local government, on factors to consider when planning a new innovation precinct.

Planning a new innovation precinct

The success of an innovation precinct is contingent on local leadership. A successful precinct builds on existing competitive strengths and innovation potential, develops local capacity and connectivity, and ensures research addresses industry and community needs.

Precinct managers should follow a coordinated and strategic approach to set a new innovation precinct on the road to success.

Top seven factors in planning a new innovation precinct

This guide explores seven key factors that precinct leaders should consider to set their precincts up for success:

- 1. Start with a base of local strengths
- Collaborate with local partners to build critical mass
- 3. Set realistic goals and engage a strong team
- 4. Set the right level of governance and investment
- 5. Tap into existing resources and communities of practice
- 6. Think beyond the local area
- 7. Create a vibrant ecosystem and liveable space

Start with a base of local strengths

Look to existing local resources and competitive strengths.

The sectoral and technological focus of the precinct should align with the wider region's competitive advantages. It should build on existing strengths, which could include 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).

Investigate potential for innovation and growth.

Potential innovation precincts should have strong future potential for growth. Consider whether the precinct can access skills and resources that will create value and further the work of the sector or technology.

The Brookings Institution, an American think tank that has undertaken in-depth research into innovation precincts, recommends avoiding 'white elephants' and 'picking winners from the top down'. Innovation precincts are unlikely to succeed if they are based on a high level vision, with no clear evidence base for their need or engagement with the expertise of local scientists and business owners on the ground.1

For example, Brookings cites a biotech district in Malaysia that was initiated by politicians, but was not successful due to the lack of private investment, qualified workers and economic demand for its products and services.² In another example, a government initiative in the United States that would help companies advance their hybrid technologies was not successful because it did not recognise that automotive makers in the state were already leading their own solution, so did not need intervention.3

2. Collaborate with local partners to build critical mass

Engage a local pool of potential participants and partners.

Participants and partners could include start-ups, small and medium enterprises, large firms, specialised suppliers, non-government organisations, researchers, educational institutions and, where possible, internationally oriented companies. Ideally, the surrounding region should already have a critical mass of these entities to support cooperation and dynamic relationships between innovation precinct participants and partners.

- Build on common interests and complementary resources among potential partners. For example, enterprises and related entities operating in the same industry value chain or building off same knowledge and technology.
- Build on existing collaborative relationships among potential partners. Innovation precincts should bring together well-aligned partnerships of industry players. research institutions and skills providers (e.g. higher education and vocational education and training providers).

¹ Clusters and Innovation Districts: Lessons from the United States Experience, https://www.brookings.edu/wp- $\frac{content/uploads/2017/12/es_20171208_bailyclusters and innovation.pdf}{^2 \ As \ above.}$

³ As above.

Promote a shared vision for the innovation precinct among all partners.

Partners are more likely to develop ongoing collaborative relationships when they have a common understanding of the innovation precinct's overarching purpose and value proposition. This can be promoted through consultation when developing the innovation precinct's vision and regular, consistent communications with all stakeholders incorporating the agreed vision.

3. Set realistic goals and engage a strong team

Set a structured and realistic plan to implement the precinct.

The plan should be based on clearly defined goals to grow the precinct and strategies that leverage local strengths.

Engage a strong, independent implementation team and champion to lead the team.

The champion and team should be experienced, not have vested interests in specific partners, and able to engage with and gain the respect of participants in the innovation precinct.

4. Set the right level of governance and investment

Make sure the governance structure is fit-for-purpose.

An innovation precinct's success relies on appropriately structured organisation and governance. There is no one-size-fits all governance model. Depending on the age, scale and sophistication of the innovation precinct, different arrangements may be appropriate. A future Innovation Precincts Insights guide will look at governance more closely.

Ensure there are resources available and financing is properly managed.

Innovation precincts, particularly with large footprints and anchor institutions, are often able to secure funding for new buildings, refurbishments and infrastructure. However, planners should also give thought to the resources and financing needed to support the ongoing operation of the innovation precinct, including facilitators, services and networking. If feasible, participants should play a part in funding and governing an innovation precinct.

It's important to get the level of governance and investment right. Too little may result in a lack of strategic direction and suboptimal growth. Too much, too early, can stifle bottom-up organic growth and impose financial and legal risks on precinct participants and funding bodies.

5. Tap into existing resources and communities of practice

Engage with other innovation precincts to share best practice approaches.
 In addition to forming connections with other Australian innovation precents, there are a variety of international communities of practice for precinct development.

Examples include the <u>University Industry Innovation Network</u>, the <u>MIT Regional Entrepreneurship Acceleration Program</u>, the <u>Association of University Research Parks</u>, the <u>International Association</u> of Science Parks and Areas of Innovation and the Network of Corporate Relations Officers.

6. Think beyond the local area

• Encourage the growth of complementary enterprises and innovation activities beyond the innovation precinct's boundaries.

Although innovation precincts concentrate activity geographically by co-locating key partners, participation in innovation precinct planning and operation should not be restricted to co-located actors. Innovation precincts should drive local economic growth and become centres of regional innovation ecosystems.

7. Create a vibrant ecosystem and liveable space

- Design and develop programs to support collaboration between diverse organisations. This can range from opportunities for informal social interaction through to formal commercial frameworks for joint ventures and projects.
- Support a strong entrepreneurial culture of risk-taking, collaboration and sharing ideas. This culture is supported by mentoring programs and a diversity of organisations and workers, and is influenced by the culture of the anchor institution
- Work with precinct partners, local businesses, organisations and governments to create a space that attracts people to work, play and live there.
 - This offers a sense of place, and encourages people to move through and within the area.
- Ensure the necessary infrastructure and facilities to support and build the precinct.
 This includes physical, transport and digital infrastructure that supports research, innovation activity and business connectivity within and outside of the precinct. A future Innovation Precincts Insights guide will look at place-making, curation and infrastructure to support innovation precincts more closely.

Case study: 22@Barcelona⁴

Officially launched in 2000, 22@Barchelona began as a government initiative to transform a rundown industrial district into a global knowledge centre. Since that time, is has become a successful, globally connected innovation precinct. Its story reflects that the precinct leaders considered many of the key factors for developing a successful precinct.

- 22@Barcelona bases itself around five sector-based clusters focusing on energy, medical technologies, design, media, and ICT. These clusters were built on established local companies, universities and institutions in the area.
- The innovation precinct incorporates major local partners such as the Barcelona Media Park, local universities with complementary education and research and development infrastructure and programs, and major ICT and pharmaceuticals companies.
- 22@Barcelona did not become a globally significant innovation precinct overnight. Its success
 is the result of sustained activity over twenty years. Each sectoral cluster within the innovation
 precinct has a facilitating organisation. These are in turn supported by the 22@Barcelona
 innovation precinct management organisation. These organisations provide business services,

⁴ http://www.22barcelona.com/

- access to common infrastructure and technology, and support collaboration between companies and R&D organisations to drive innovation.
- The urban renewal projects and infrastructure supporting 22@Barcelona were underwritten by €180 million in local government investment from 2000-2010. The innovation precinct management organisation has been set up by the local government to support operation of the precinct. Each of the five cluster organisations also participate in the operation of the precinct.
- 22@Barcelona is a member of various international communities of practice, including the TCI Network, and the European Network of Living Labs. These communities act as a platform for sharing best practice, learnings and support between members.
- Organisations and institutions situated in 22@Barcelona participate in international collaborations such as ITER, a global collaboration to develop feasible fusion-based electricity, and engage with regional, European and global partners and markets.
- The creation of 22@Barcelona was supported by renewal of public spaces, new energy and transport infrastructure, and residential areas. The precinct also includes green space and cultural institutions. The precinct organisations runs a calendar of networking and workshop sessions, and collaborative activities to encourage partners to engage and collaborate.



Caption: 22@Barcelona from the air (Source: 22@Barcelona).

22@Barcelona has successfully promoted economic growth and job creation. From 2000-2011, 4,500 new companies moved into the district, and 56,000 new jobs were created (with half of these employees having undertaken or completed university studies).

22@Barcelona has also been recognised as a successful model for renewing urban areas, encouraging economic development and promoting social welfare. Its model is now being applied in other locations internationally, including Boston, Rio de Janeiro and Cape Town.

The end goal: A highly developed innovation precinct

The factors discussed in this guide are the building blocks that over time, will develop a sophisticated, richly networked, innovation precinct. An innovation precinct that:

- Is recognised as an important regional, national and even international hub, adding value to its industry or technology focus.
- Has networks locally, regionally, nationally and internationally, including:
 - between industry, non-government organisations and research and educational institutions
 - business-to-business, such as collaboration up and down supply chains and value chains.
- Has a growing concentration of innovation precinct partners, and growth in complementary enterprises in the region's wider innovation ecosystem.
- Has rich and growing networks beyond the innovation precinct's borders, including:
 - with other innovation precincts and industry clusters
 - with complementary actors in the local area
 - national and international.
- Regularly collaborates on innovation, including through cross-sectoral, cross-regional and international innovation partnerships.
- Has trust between innovation precinct partners, and a shared recognition of the innovation precinct's value.
- Has physical, transport and digital infrastructure that supports research, innovation activity and business connectivity within and outside of the innovation precinct.
- Is a vibrant and liveable place that attracts people to work, play and live.

Take home: getting off to the best start

When planning an innovation precinct, follow a coordinated and strategic approach to help get the project off to a good start. Considering the seven factors will help set a precinct up for success:

- 1. Start with a base of local strengths
- 2. Collaborate with local partners to build critical mass
- 3. Set realistic goals and engage a strong team
- 4. Set the right level of governance and investment
- 5. Tap into existing resources and communities of practice
- 6. Think beyond the local area
- 7. Create a vibrant and liveable location.

Background

The value of developing Australian innovation precincts has been recognised by Australian, state and territory governments. For example Innovation and Science Australia's 2016 performance audit of the innovation system and Australia 2030: Prosperity through Innovation identified improving knowledge transfer and industry-research collaboration as a priority challenge.

Recognising this, in 2018 the Australian Government released the <u>Statement of Principles for Australian Innovation Precincts</u>, which provides best practice guidance to drive successful development of innovation precincts. The report identifies four core principles for building a successful innovation precinct:

- local leadership
- removing barriers and aligning policy
- building capability and connections
- skills development.

State and territory governments agreed to the principles at the <u>COAG Industry and Skills Council</u> meeting in April 2018.

The NSW Innovation and Productivity Council released <u>NSW Innovation Precincts: Lessons from International Experience</u> to understand the factors that contribute to successful, globally-significant innovation precincts as well as common risks and failures.

The Victorian Government has released <u>Unlocking Enterprise in a Changing Economy</u>, a planning policy dedicated to the promotion of local 'Enterprise Precincts' as hubs for the emerging economy to complement larger National Employment and Innovation Clusters.

The Department of Industry, Innovation and Science has also worked with CSIRO's Data61 to develop a map of Australian innovation precincts, hosted on Innovation Map.

Australia can also look to successful precincts internationally. There are successful innovation precinct operations around the world. The <u>Brookings Institution</u>, based in Washington DC, has collected a significant body of evidence drawing on case studies in the United States of America.

For more information

For more information on best practice approaches to innovation precincts:

- Visit industry.gov.au/InnovationPrecincts
- Read the <u>Statement of Principles for Australian Innovation Precincts</u>
- Read <u>NSW Innovation Precincts: Lessons from International Experience</u>
- Subscribe to the Australian Innovation Precincts Newsletter
- Contact InnovationPrecinctChampions@industry.gov.au.