

Evaluating the efficacy of policymaking for Tonsley: a hub driving regional innovation?

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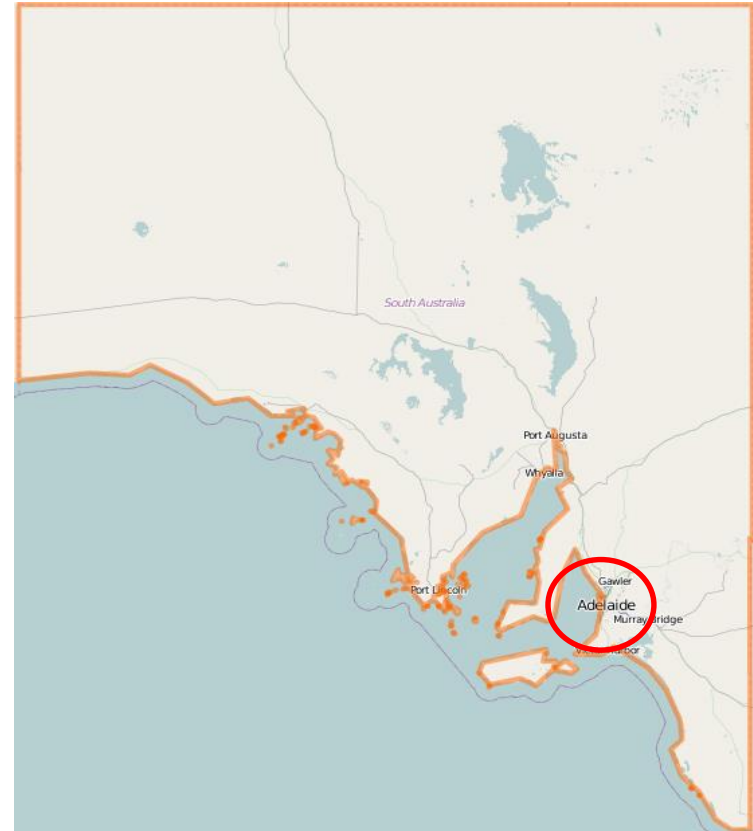
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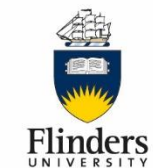


- Background
Industrialisation/deindustrialisation in South Australia/Tonsley
- A regional constructed advantage framework
- Methodology
- Evaluating the Tonsley policy platform
- Implications and further research



Background: Industrialisation & deindustrialisation in South Australia (SA)





[Elizabeth]

Torrens Island Conservation Park

Salisbury

Parade Airport

Cobbler Creek Recreation Park

Angrove Conservation Park

Modbury

Adelaide

Adelaide Airport

Tonsley

Belair National Park

Blackwood Forest Recreation Park

Sturt Gorge Recreation Park

Marino Conservation Park

Mount George Conservation Park

Stirling

Bradbury

Scott Creek Conservation Park

Lonsdale

Noarlunga Centre

Onkaparinga River National Park

Tree Hill



HOLDEN



- Post-war: manufacturing industrialisation (industry policy)
- 1970s-1990s: manufacturing decline (rise of newly industrialising economies)
- 2000s: mining boom's negative impact on manufacturing
- 2004: Mitsubishi Lonsdale (engineering) closure (700 jobs)
- 2006: Mitsubishi Tonsley (assembly) closure announcement
- 2008: Mitsubishi Tonsley closure
- 2017: General Motors Holden ends operations [End of automotive manufacturing in Australia]



Mitsubishi Motors Australia - Tonsley

2010: Purchase of Tonsley site by SA government (A\$35m)
Commitment to re-development (A\$218m)



Photo: Bryan Charlton

Tonsley Master Plan (2012-2027)



Tonsley Innovation Precinct



A framework to evaluate Tonsley as a hub for regional innovation

- Tonsley's development informed by:
 - Co-location
 - Agglomeration
 - Clustering
- Tonsley's development exhibits:
 - Constructed advantage approach to regional innovation (Cooke & Leydesdorff, 2006)
 - Related variety of industrial knowledge (Asheim *et al.*, 2011)
- Constructing regional advantage requires integration of related platforms (Cooke, 2007):
 - Industry
 - Stakeholder
 - Policy



The 'Tonsley Model'

Physical assets

Development of high amenity mixed-use urban form that emphasises 'public realm'

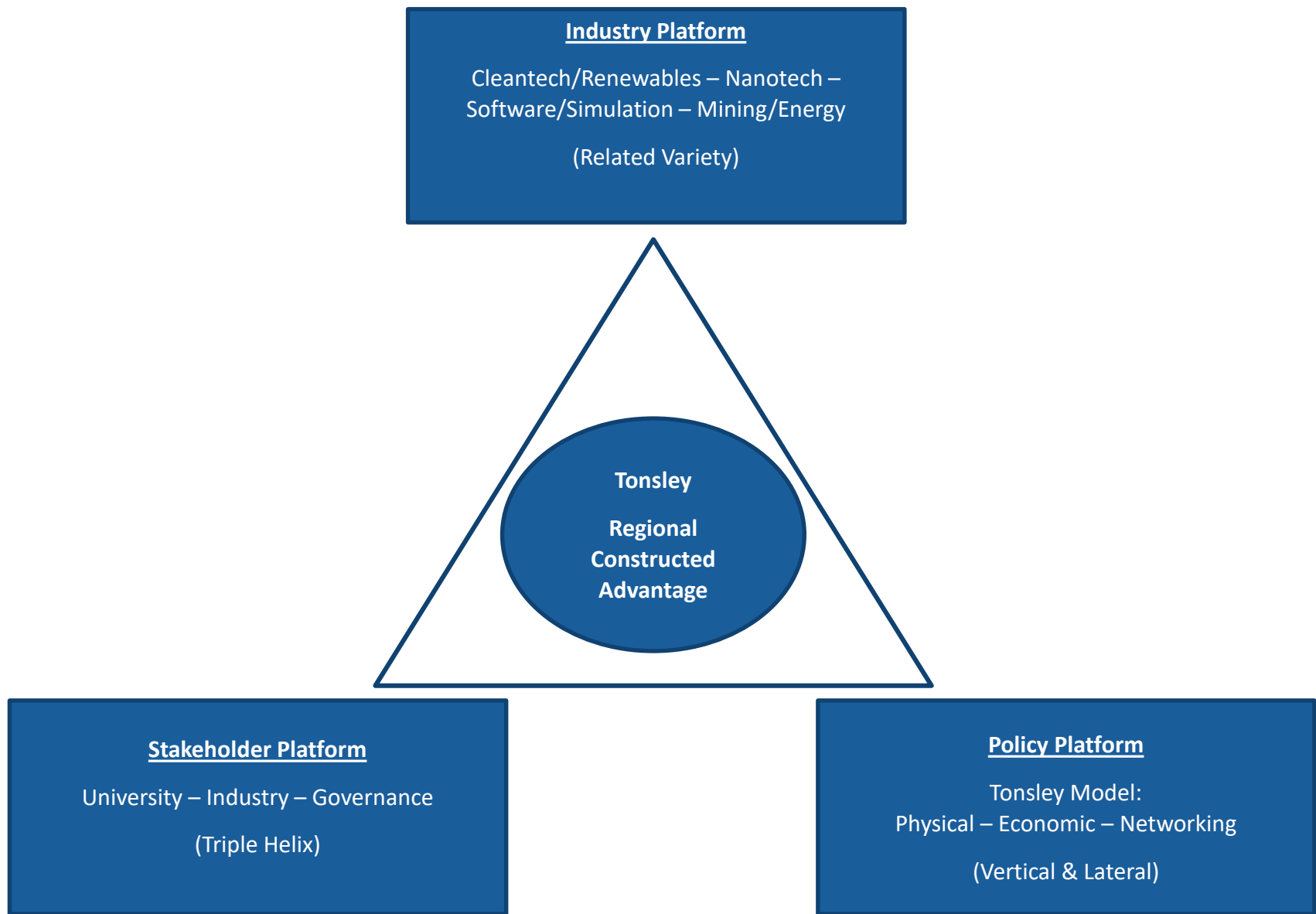
Economic assets

A population of anchor business, research and training institutions designed to create 'planned serendipity'

Networking assets

an environment that supports entrepreneurial activity, and a culture of innovation encouraged through 'hard' and 'soft' infrastructures





Adapted from Cooke (2007)

The 'Tonsley model' for developing an 'innovation ecosystem'

*Is the Tonsley model an effective policy
platform to make Tonsley Innovation
Precinct a hub for regional innovation?*

*Is it an effective driver of regional
constructed advantage?*



Methodology

- Analysis of policy documents
- Interviews with key policymakers (4 to date)

Policy Platform 'Interfacing Elements	Characteristics/features
Economy	open systems inter-firm integrations integration of knowledge generation and commercialisation smart infrastructures strong local and global business networks
Knowledge infrastructure	active involvement of universities public sector research intermediary agencies professional consultancies
Community & culture	cosmopolitanism sustainability talented human capital creative cultural environments social tolerance
Governance	multi-level governance of associational and stakeholder interests strong policy support for innovators enhanced budgets for research vision-led policy leadership global positioning of local assets

Cooke & Leydesdorff (2006)



Evaluating the Tonsley policy platform: Economy

- Strong 'open innovation' features
 - Scalar, sectoral, spatial integration of knowledge
 - Shared resources
 - High-speed internet
- Smart infrastructure
 - Adaptive re-use
- Tensions – economic vs. property led development

- Tonsley's re-development required an economic approach
- Long-term (state) investment in development, commercialisation of knowledge

Treasury were absolutely bloody adamant in the negotiations ... they wanted Renewal SA to own the land ... I said 'This has to be an economic development model, not a land development model', and they said 'No, the owner of the land must be Renewal SA'. (Interviewee 1)



Evaluating the Tonsley policy platform: Knowledge infrastructure

- Active involvement of tertiary institutions
 - Anchor tenants: Flinders University; TAFE (VET education & training)
 - Private sector investment: Siemens investment broadening scope of Tonsley's 'brand'

- Intermediary agencies
 - State investment attraction: e.g. Siemens, SAGE Automation, Tesla, Zeiss

[T]he main thing was going to be who are going to be the anchor tenants in order to give it minimum viability early on? And that had to be Flinders and TAFE. And it probably had to be ... the state being a patient investor in it. (Interviewee 4)



Evaluating the Tonsley policy platform: Community & culture

- Creative cultural environments
 - ‘hard’ and ‘soft’ infrastructure
- Talented human capital
 - 2018: 32 businesses, 1,400 employees, 6,500 tertiary & VET students
- Cosmopolitanism
 - Multi-use precinct featuring cafes, sport facilities
 - Residential component (2018); Pub (2019)

It doesn't necessarily just happen by co-locating people on a 64-hectare site ... I think a lot of work and thinking has gone into [supporting development of] the capacity for industry through the whole ecosystem to be able to collaborate. (Interviewee 3)



Evaluating the Tonsley policy platform: Governance

- Strong policy support for innovators
 - New Venture Institute (Flinders), Innovyz (state gov't)
 - Manufacturing Innovation Hub (Flinders)
 - Medical device R&D (Flinders)

- Governance remains a significant challenge
 - Tonsley model lacks clear strategic intent, directive leadership (i.e. to construct regional advantage)

What I wanted to happen and it never happened, was that we set up a small arms-length team that formed a trust, if you like, Tonsley Park development trust, whatever it was – a government-owned trust that could operate in isolation from the system, not in Renewal SA, but in that it had relevant expertise capable of making decisions quickly, responding, negotiating with companies and all those sorts of things. (Interviewee 1)



- Moving forward: no clear signs of governance framework development
 - Fuzzy on ‘smart specialisation’ despite elements of specialisation
 - Mitsubishi departing Tonsley site in 2019

I’m not convinced we’ve got the [governance] model right yet, and as I said, the old government took a very strong leadership role, yet time will tell ... as to the role of government going forward. (Interviewee 2)

There is no better aggregate – there is no other aggregator than government, from the point of view of having a concept of what synergies you want, what complementarities you want to build, and bringing that into being. If it weren’t run by government it would be even more fragmented than it is – it’s fragmented enough now. (Interviewee 4)



Implications and further research

- What options available for development at Tonsley?
 - Importance of place-based leadership (Beer *et al.*, 2018)
 - Tonsley governance as ‘learning process’? (Capello & Lenzi, 2018)
 - University leadership: Industry 4.0 ‘future factory’

Implications and further research

- Focus on benefits to firms at Tonsley
 - Role of improved governance structures to strategise for regional constructed advantage

Constructing regional advantage likely to be important in a deindustrialising region

References

Asheim B.T., Boschma R. and Cooke P. (2011). Constructing Regional Advantage: Platform Policies Based on Related Variety and Differentiated Knowledge Bases. *Regional Studies* 45: 893-904.

Beer A., Ayres S., Clower T., Faller, F. Sancino, A. and Sotorauta, M. (2018). Place leadership and regional economic development: a framework for cross-regional analysis. *Regional Studies*: 1-12, doi: 10.1080/00343404.2018.1447662

Beer A. and Cooper J. (2007) University-Regional Partnership in a Period of Structural Adjustment: Lessons from Southern Adelaide's Response to an Automobile Plant Closure. *European Planning Studies* 15: 1063-1084.

Capello R. and Lenzi C. (2018) Regional innovation patterns from an evolutionary perspective. *Regional Studies* 52: 159-171.

Chesborough H. (2003) *Open Innovation*, Boston, USA: Harvard Business School Press.

Cooke P. (2007) To Construct Regional Advantage from Innovation Systems First Build Policy Platforms. *European Planning Studies* 15: 179-194.

Cooke P. and Leydesdorff L. (2006) Regional Development in the Knowledge-Based Economy: The Construction of Advantage. *The Journal of Technology Transfer* 31: 5-15.

DMITRE. (2012) Tonsley - Economic Development Framework: Founding Principles. Adelaide, Australia: Department for Manufacturing, Innovation, Trade, Resources and Energy, Government of South Australia.

Renewal SA. (2018) Tonsley Innovation District - Information for Investors, April 2018. Adelaide, Australia: Government of South Australia.

Tonsley. (2018) *The Tonsley Model*. Available at: <https://tonsley.com.au/the-tonsley-model/>.



