BUILDING REGIONAL RESEARCH CAPACITY
NORTHERN RESEARCH FUTURES
COLLABORATIVE RESEARCH NETWORK

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A Northern Perspective
CRN Northern Australian Development Conference 2014
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RD&E for the North

Research

Development

Extension

Addressing societal challenges arising during the ongoing Development of Northern Australia

This conference is supported through the Australian Government’s Collaborative Research Networks (CRN) program and has been facilitated by the Northern Institute.
Green Paper on Developing Northern Australia

Raises many RD&E challenges:

- Using & planning physical and social infrastructure
- Improving information about land title and land use
- Comprehensive water resource assessment
- Innovating business-friendly public policy
- Engagement with international development in the region
- Capable & resilient local institutions
- And many more...

What arrangements will enable this RD&E to occur, in ways that are reliable, thorough and available to stakeholders when they need it?
There are two related but distinct roles for public support for RD&E

1. Government **procuring** RD&E for its own needs
2. Government **subsidising** RD&E when private interests cannot capture the maximum returns on their investment

2012 investments in RD&E in Australian universities

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<th>Procurement</th>
<th>Subsidy</th>
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<tr>
<td>State &amp; Local Gov</td>
<td>$418,120,112</td>
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<td>Universities</td>
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The CRN program is public support targeted to build and maintain parts of the Australian innovation system to serve both purposes
Government procuring RD&E for its own needs

• Local knowledge and rich networks to provide powerful and effective RD&E for Northern Development

• Purchasers receive a large subsidy because universities co-invest in discovery activities to build their intellectual capital
Government subsidises for RD&E

Offered because private interests don’t expect to get 100% of the value from their investments in RD&E

- Research is a high-cost gamble – no answer can be given until the money is spent
- Subsidies enable pre-competitive research that is expensive and of broad interest
- When public support is provided to subsidise research, there is generally a need to maximise the spread by *extension*, to promote maximal spill-over effects
- The Green Paper on Developing the North presents many situations where research and development is required as a prelude to private investment (water & mineral resources, infrastructure, liveability, economic & social institutions)
Universities have many complexions

• Knowledge factory (patents, articles)
• Entrepreneurial (commercialise own discoveries)
• Engaged (abundant scholarly links)
• Regional, systemic (animate advancement)
• Relationship broker (abundant open channels)

Network structures such as the CRN allow a regional university (new, small, rich local relationships) to link with other universities of complementary complexion.
Collaborative RD&E

• Networked research among universities enables many researchers and stakeholders to participate in RD&E, optimising the spill-over outcomes expected of the broader investments.

• Networked research among universities have (fixed) opportunity costs that can be removed by ongoing public funding to provide enhanced RD&E services for particular societal challenges.
Conclusion

• An important, long term requirement for Northern Development is RD&E capacity built and maintained by public support

• Collaborative research networks are a requisite component of the Australian innovation system and nodes are required in the North

• There are compelling reasons for the Commonwealth to maintain a CRN–like program at CDU as an essential element of Northern Development