Commonwealth infrastructure funding for Australian universities: 2004 to 2011

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This paper provides an overview of recent trends in the provision of general infrastructure funding by the Commonwealth for Australian universities (Table A providers) over the period 2004 to 2011. It specifically examines general infrastructure development and excludes funding for research infrastructure through the Australian Research Council or the research funding programme of the Education Investment Fund.

The Rudd Labor Government was elected in 2007 with a commitment to expand participation in higher education, culminating in a policy to ensure that 40 per cent of all 25- to 34-year-olds in Australia held a qualification at the bachelor's level or above by 2025. The reform agenda to attain this goal was established in the government's policy blueprint, Transforming Australia's Higher Education System, and included a number of key initiatives in capital expenditure and spending on student income support (DEEWR, 2009).

A key component of this agenda has been a renewed focus on infrastructure funding for higher education, both generally and as part of the Rudd-Gillard push to ensure the higher education sector is equipped to handle increased student demand, in keeping with the recommendations of key inquiries such as the Bradley Review of Higher Education (the 'Bradley Review'), where it was observed that:

> Over the last decade there has been relatively limited funding available specifically for the development of capital infrastructure or its refurbishment. This has meant that there is a backlog of renewal and refurbishment projects in the sector and some facilities are now sub-standard and inadequate for teaching and research purposes (DEEWR, 2008, p. 171).

Since then, initiatives by the Rudd and Gillard Governments to boost infrastructure funding have centred around the creation of the Education Infrastructure Fund – drawing on resources from its 2007 Howard Government predecessor, the Higher Education Endowment Fund – whereby the Commonwealth has allocated $4.15 billion through the Education Infrastructure Fund to support higher education and vocational education and training infrastructure development, as well as other specific measures detailed below. Interestingly enough, the Bradley Review found that these measures were probably sufficient to ensure infrastructure provision across the

higher education sector, provided the principal in the Education Infrastructure Fund was not accessed directly, as opposed to its income stream.

Given the recent focus on infrastructure funding in higher education, an important question that needs to be asked of recent expenditure is the extent to which it has been managed both geographically and also across institutional settings. It may well be the case that the overall picture of the system clouds attention to areas which require further funding to allow the Commonwealth to meet its objectives in terms of equity and participation.

Table 1: Trends in Commonwealth Infrastructure Funding, By Major Programme, 2004 to 2011, $ million.

Year	*Capital Development Pool*	*Education Investment Fund*	*Teaching and Learning Capital Fund*	*Better Universities Renewal Funding*	*Structural Adjustment Fund*	*Total*
2004	39.2	-	-	-	-	39.2
2005	36.9	-	-	-	-	36.9
2006	38.2	-	-	-	-	38.2
2007	18.9	-	-	-	-	18.9
2008	61.6	461.8	492.9	495.7	368.2	1,880.2
2009	59.8	498.7	-	-	-	558.5
2010	61.8	180.1	-	-	-	241.9
2011	46.0	-	-	-	-	46.0
Total	362.4	1,140.6	492.9	495.7	368.2	2,859.8

Source: DEEWR (2012) Announced Infrastructure Funding for Table A Universities.

This paper provides a preliminary assessment of how Commonwealth infrastructure funding has been distributed across the higher education system over the period 2004 to 2011, the most recent period for which final data are available at the time of writing.

Trends in Commonwealth infrastructure funding in higher education

The Commonwealth provides infrastructure funding to higher education through a variety programmes. The analysis below draws on programme data provided by the then Department of Education, Employment and Workplace Relations (DEEWR) to assess patterns in this spending with specific reference to the 39 'Table A providers' (DEEWR, 2012).

It covers the five major capital programmes in operation at various points of the last eight years from 2004 to 2011:

- Capital Development Pool: In operation between 2004 to 2011, with a total of $362.4 million distributed to individual institutions, as well as $20.1 million distributed as multi-partner funding involving two or more institutions. The Capital Development Pool was abolished on 1 January 2012.
- Education Investment Fund: In operation from 2008, with a total of $1,140.6 million distributed, excluding research-related capital funding and prospective funding through the 2011-12 'Regional Priorites Round'.
- Teaching and Learning Capital Fund: Funds thus far only distributed in 2008, with $492.9 million provided to Table A provider universities out of a total pool of $500 million.
- Better Universities Renewal Funding: Funds only distributed in 2008 of $495.7 million to Table A provider universities out of a total pool of $500 million, and
- Structural Adjustment Fund: Funds only distributed in 2011 (thus far) of $368.2 million to Table A provider universities, including $8.9 million in multi-partner funding.

All spending undertaken through these funds is included in this analysis, except for research and development funding through the Education Investment Fund, information for which has not been made publicly available, and multi-partner (multi-institutions) funding of $29 million over the seven year period to 2011. This analysis also excludes the 2011-12 'Regional Priorities Round' of the Education Investment Fund, which will provide $500 million in funds for the higher education and vocational education and training providers. Full details of projects to be funded under this round were not yet announced at the time of writing.

Table 1 reports on Commonwealth infrastructure funding trends. In total, funding across all funds (excluding multi-partner and Education Investment Fund research and development spending) was equal to $2,859.8 million between 2004 and 2011, or around $73.3 million per higher education institution (the 39 Table A providers). To place these figures in context, domestic undergraduate enrolment in Table A providers towards the end of this period in 2010 was equal to 590,605, implying capital expenditure over 2004 to 2011 of $4,842 per each 2010 student place.

Table 2: Commonwealth Infrastructure Funding (Total over 2004 to 2011) and 2010 Domestic Enrolment (persons), By State

State or Territory	*Infrastructure Funding (2004 to 2011), $m*	*Share*	*2010 Domestic Enrolment*	*Share*	*Funding Share/ Domestic Enrolment Share Ratio 1*
New South Wales	922.2	32.2%	185,704	31.4%	1.02
Victoria	687.0	24.0%	134,566	22.8%	1.05
Queensland	602.9	21.1%	117,364	19.9%	1.06
Western Australia	160.3	5.6%	65,246	11.0%	0.51
South Australia	170.9	6.0%	41,669	7.1%	0.85
Tasmania	42.2	1.5%	13,160	2.2%	0.67
Northern Territory	68.7	2.4%	5,243	0.9%	2.70
Australian Capital Territory	186.2	6.5%	15,776	2.7%	2.43
Multi-State	19.4	0.7%	11,877	2.0%	0.35
Australia	2,859.8	100.0%	590,605	100.0%	1.00

Source: DEEWR (2012) Announced Infrastructure Funding for Table A Universities; DEEWR (2011) Selected Higher Education Statistics. Note: 1. This is the ratio of Infrastructure Funding to Domestic Enrolment. A ratio of 1.00 indicates share of funding equals the share of enrolment. A ratio greater (less) than 1.00 indicates more (less) funding on a per capita basis, as measured by domestic enrolment.

The distribution of this expenditure varies over time. The earliest established fund, the Capital Development Pool, has been in operation over the entire eight year period and has seen a steady rate of spending over its life, with $362.4 million being distributed to individual institutions, at an average of $45.3 million per annum. The Capital Development Pool was the preferred vehicle for infrastructure funding over much of the tenure of the Howard Government which was in office between 2004 to 2007 when $133.2 million was distributed to universities to spend on infrastructure, accounting for 4.7 per cent of all funding over the eight-year period under examination.

The Rudd-Gillard Governments have been more assertive in funding higher education infrastructure, at least during their first three years in office. The key infrastructure fund established under the Rudd-Gillard Government, the Education Investment Fund, distributed $1,140.6 million in three years, with total financing of $2,726.6 million being made available. The balance of funding took place through the other three funds – Teaching and Learning Capital Fund, Better Universities Renewal Funding and Structural Adjustment Fund – mostly in 2008, in large part as a consequence of the global financial crisis which saw the Rudd Government bring forward or initiate new expenditure over 2008-09. In total, $1,880.2 million of infrastructure funding was allocated in 2008, around 65.7 per cent of total capital funding over the eight years.

Further analysis of this funding across institutions can take place by examining expenditure patterns across three potential groupings:

- A comparison across the States and Territories;
- Notional groupings of the universities themselves (the Group of Eight or Australian Technology Network for instance), as set out in the 2008 Bradley Review; and
- An analysis of university groupings using broader DEEWR classifications for the regional loading policy.

This analysis uses an aggregate measure of student numbers, which is the enrolment headcount rather than EFTSL (equivalent full-time student load) data. International and postgraduate coursework students are excluded from this base because they are full fee paying students, with their fees being adjusted in view of the resources available to fund places and infrastructure for undergraduates. Postgraduate higher degree by research students are also excluded, as they are separately funded via research programmes and the research sub-programmes of the Education Investment Fund, which are excluded from this analysis. The use of 2010 as the base year for enrolments is an appropriate indicator given that 95.3 per cent of infrastructure funding has taken place since 2008.

State analysis

An overview of Commonwealth infrastructure funding trends across the States and Territories can be seen in Table 2. It compares expenditure between jurisdictions on the basis of domestic (undergraduate) student enrolment

in 2010, the most recent year for which full data are available (see Phillimore & Koshy (2011) for details).

Amongst these, institutions in the three most populous states, New South Wales, Victoria and Queensland, receive a share of infrastructure funding which is broadly proportional to their share of domestic higher education enrolments. For instance, New South Wales receives 32.2 per cent of funding for 31.4 per cent of students in 2010, a funding share to student share ratio of 1.02. Queensland (21.1 per cent of funding with 19.9 per cent of students) receives funding which is approximately 6 per cent greater than its student share might dictate, with a ratio of the two being equal to 1.06.

Table 3: Commonwealth Infrastructure Funding (Total over 2004 to 2011) and 2010 Domestic Enrolment (persons), By Institutional Grouping (Table A Providers)

Grouping	*Infrastructure Funding (2004 to 2011), $m*	*Share*	*2010 Domestic Enrolment*	*Share*	*Funding Share/ Domestic Enrolment Share Ratio 1*
Group of Eight	949.7	33.2%	157,289	26.6%	1.25
Australian Technology Network	447.6	15.7%	99,423	16.8%	0.93
1960/70s universities	597.2	20.9%	168,290	28.5%	0.73
Post-1988 universities	865.3	30.3%	165,603	28.0%	1.08
All Table A Providers	2,859.8	100.0%	590,605	100.0%	1.00
Regional Universities Australia	482.1	16.9%	68,117	11.5%	1.47

Source: DEEWR (2012) Announced Infrastructure Funding for Table A Universities; DEEWR (2011) Selected Higher Education Statistics. Note: 1. See Note 1 in Table 2.

The less populous of the States and Territories are split between those receiving less than their student share – Western Australia, which has received 5.6 per cent of funding for 11 per cent of the students, South Australia and Tasmania – and the Northern Territory and Australian Capital Territory, who each receive substantially more funding than the student enrolment share of their institutions might dictate.

Institutional Grouping Analysis

Another way to examine this funding relativity is by breaking the Table A providers down on an institutional grouping basis. We use four commonly identified groupings:

1. The Group of Eight universities: Australian National University, Melbourne, Monash, Sydney, New South Wales, Queensland, Western Australia and Adelaide.
2. The Australian Technology Network: Curtin, University of Technology Sydney, RMIT University, Queensland University of Technology, and University of South Australia.
3. The 11 universities founded in the 1960s and 1970s: Tasmania, Murdoch, Flinders, Griffith, James Cook, Macquarie, Newcastle, New England, Wollongong, La Trobe, and Deakin.
4. The 17 post-1988 universities: Australian Catholic University, Canberra, Edith Cowan, Charles Darwin, Batchelor Institute, Swinburne, Victoria, Ballarat, Sunshine Coast, Central Queensland, Southern Queensland, Southern Cross, Western Sydney, Charles Sturt, Bond, Notre Dame and the Melbourne College of Divinity.

In addition, regional enrolments can be analysed for a new grouping of universities from the above list:

5. Regional Universities Australia (RUA): comprised of: Charles Sturt, Southern Cross, New England, Ballarat, Central Queensland and Southern Queensland.

Table 3 reports on infrastructure funding (2004 to 2011) and enrolment (2010) across these major institutional groupings. As is the case with jurisdictions, there appears to be a wide discrepancy in the way funding is allocated to Table A providers. The Group of Eight receive 33.2 per cent of all infrastructure funding (excluding research and development funding under the Education Investment Fund where they are similarly well represented) in comparison with a domestic student enrolment equal to 26.6 per cent of the total. For each percentage point share of the total domestic student enrolment in 2010, the Group of Eight has received 1.25 percentage points of all infrastructure spending between 2004 and 2011.

The Australian Technology Network (funding share-domestic enrolment ratio of 0.93) and 1960/70s (0.73) groupings receive less infrastructure than their student enrolment would dictate, while the Post-1988 group of universities has received an additional 8 per cent of funding over a pro rata allocation on the basis of 2010 student enrolment. The Regional Universities Australia group of universities has benefited specifically from infrastructure funding since 2004, obtaining 16.9 per cent of all spend-

Table 4: Commonwealth Infrastructure Funding, Total over 2004 to 2011, by 2010 Domestic Enrolment (persons), by DEEWR Institutional

Grouping (Table A Providers) Grouping	*Infrastructure Funding (2004 to 2011), $m*	*Share*	*2010 Domestic Enrolment*	*Share*	*Funding Share/ Domestic Enrolment Shar Ratio1*
Regionally Headquartered	621.4	21.7%	97,115	16.4%	1.32
Metro with Regional Students	1413.3	49.4%	315,296	53.4%	0.93
All Table A Providers	2859.8	100.0%	590,605	100.0%	1.00
Other Institutions	825.1	28.8%	178,194	30.2%	0.95

Source: DEEWR (2012) Announced Infrastructure Funding for Table A Universities; DEEWR (2011) Selected Higher Education Statistics. Note: 1. See Note 1 in Table 2.

ing with around 11.5 per cent of the 2010 student enrolment, implying a share of funding equal to 1.47 times this group's share of enrolments.

DEEWR Classifications and Regional Enrolment

Another way to examine the split in infrastructure funding is to look at spending on institutions with a regional presence or main campus in comparison with other providers as this is larger and more representative than the Regional Universities Australia group. In its assessment of the regional loading scheme, DEEWR identifies two classes of Table A providers:

1. Regionally Headquartered: Ten institutions with a major campus in a regional or remote area – Charles Sturt, Southern Cross, New England, Ballarat, Central Queensland, James Cook, Southern Queensland, Tasmania, Bachelor Institute and Charles Darwin.
2. Metropolitan Institutions with Regional Campuses: Twenty institutions with one or more regional campus – Newcastle, Sydney, Wollongong, Deakin, La Trobe, Monash, RMIT University, Melbourne, Queensland University of Technology, Queensland, Sunshine Coast, Curtin, Edith Cowan, Murdoch, Notre Dame, Western Australia, Flinders, Adelaide, University of South Australia and Australian Catholic University.

The Regionally Headquartered group of universities account for 16.4 per cent of all students, yet received 21.7 per cent of infrastructure funding between 2004 and 2011, indicating a ratio of funding to domestic enrolment of 1.32. Metropolitan Institutions with Regional Campuses received significantly less, around 49.4 per cent of all funding with 53.4 per cent of the domestic enrolment, for a funding to enrolment ratio of 0.93. Other Institutions received $825.1 million in infrastructure funding, or around 28.8 per cent of the total compared with their domestic enrolment of 178,194 or around 30.2 per cent of the total. This makes them, along with the Metropolitan Institutions with Regional Campuses group, recipients of below-average levels of infrastructure funding.

Implications: Infrastructure Funding

A preliminary analysis of infrastructure funding between 2004 and 2011 shows this expenditure has tended to favour States/Territories and institutions with campuses in regional areas. Regional institutions (on two broad measures) received capital grants at a rate at least 30 per cent above their share of the domestic undergraduate student enrolment over this period.

Several institutional groupings receive less than their 'enrolment share' of infrastructure funding, including the Australian Technology Network group of universities, where the share of total infrastructure funding is equal to only 93 per cent of their enrolment share.

This divergence is even more pronounced at the State and Territory level. Notably, Western Australia, with no regional universities and few significant regional campuses, has a capital share equal to only 51 per cent or domestic enrolment share, far lower than average levels of capital funding in total.

Given the stated focus on 'regional spending', some consideration needs to be paid to the underlying motivation for this funding in view of stated government policy commitments to:

- Capital to universities.
- Regional campus development, and
- Increased participation by students from low socio-economic status and/or regional areas.

In particular, there needs to be a clarification of these goals, and the means and strategies to attain them (along with other strategies such as student accommodation policy), in order to ensure clarity and consistency in policy development and implementation and to ensure that policy goals are attained.

Further, the relationship between capital provision and student enrolment load also needs to be considered, particularly in view of the sector's recent deregulation of student places and the potential for 'disconnect' between

policy intention and outcomes where capital provision does not 'follow' student enrolment trends.

Conclusion

In recent years, infrastructure funding in higher education in Australia has increased quite dramatically, with 95 per cent of the $2,859.8 million invested in capital in the sector since 2004 being spent in the last four years.

A number of institutions in various States and Territories and/or institutional groupings received less than their 'enrolment share' of infrastructure funding between 2004 and 2011. There is also evidence to suggest that similar disparities emerge at the State and Territory level.

Regional universities have received a disproportionate share of the funding compared to their level of student enrolments, and this will be exacerbated once the $500 million Regional Priorities Round of the Education Investment Fund has been finally taken into account. . These disparities have implications for future Commonwealth policy in higher education capital spending, particularly as it intersects with other critical issues such as the promotion of higher education participation by regional students, more than half of whom attend non-regionally headquartered universities.A reconsideration of the direction of capital infrastructure funding is particularly pertinent in the emerging policy environment where base funding is more closely linked to trends and shifts in student enrolments.

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