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1. Introduction

1.1 About Infrastructure Partnerships Australia

Infrastructure Partnerships Australia (IPA) is the nation's peak infrastructure organisation. Our Membership is comprised of Australia's most senior business leaders and public sector executives from across the infrastructure sector. IPA is the only body which brings together the public and private sectors in a spirit of partnership, to build Australia together. Infrastructure is the lifeblood of the national economy. It is the key to how Australia does business, how we compete in the global economy and how we sustain the quality of life of a growing population. IPA's mission is to develop and articulate the best public policy solutions needed to deliver the assets and services that will secure Australia's productivity and prosperity. IPA is committed to ensure that governments retain all procurement options for the delivery of infrastructure. We believe that procurement models must be selected case by case, with a guiding principle of sustainably delivering better value, better quality infrastructure.

1.2 Recommendations

Australia's superannuation industry has signalled a desire to undertake further investment in the domestic infrastructure sector. This investment will play an important role in securing national competitiveness and productivity, as well as providing a stable investment class to benefit superannuants.

The Australian Government should outline an ongoing commitment to work in partnership with the infrastructure and superannuation industries to promote and support investment, according to a number of guiding principles:

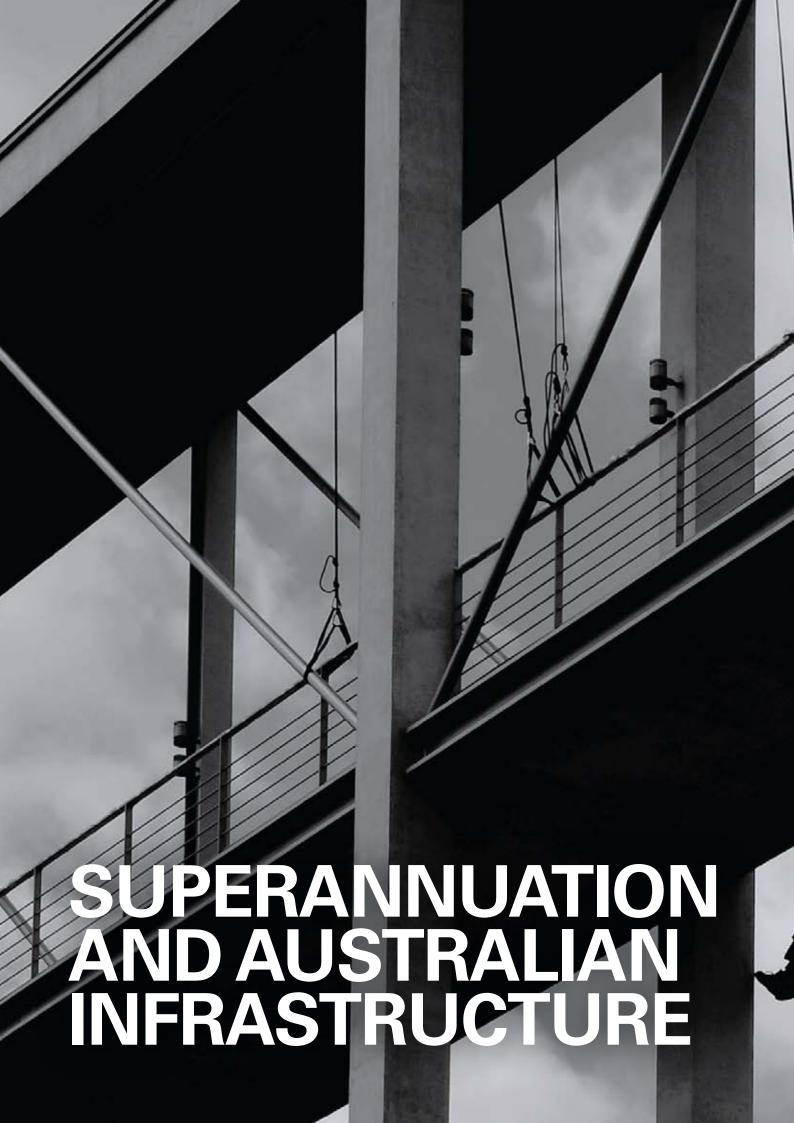
- Investment must take place on commercial terms;
- Promote the Australian market as an international leader in private infrastructure;
- Acceptance of infrastructure as a discrete investment class and better appreciation of the various sub-classes within the broad asset class;
- Support for the development of attractive investment products; and,
- Create a stable and sustainable infrastructure marketplace.

In order to boost the attractiveness of infrastructure investment to superannuation funds, government and industry should work together to address barriers, a number of which act as common obstacles to further investment by both superannuation funds and other managed funds, including:

- A near singular accumulation focus from many superannuation funds;
- An insubstantial consideration and offering of annuity products by superannuation funds;
- A proliferation of smaller less efficient superannuation funds;
- Insufficient internal expertise in infrastructure;
- Complex and expensive bid processes;
- Lack of transparency about the project pipeline and investment opportunities;
- Constraints caused by the mismatch of unlisted infrastructure with the attendant portability and liquidity requirements;
- The need for a project-by-project consideration of risk allocation;
- Inadequate long-term integrated infrastructure planning; and,
- Limited range of projects to match a diversified appetite for risk.

The Australian Government should address barriers to further investment by:

- **Refocusing Superannuation to Lifecycle** the development of a threetier superannuation industry, comprising pre-retirement (accumulation), retirement (transition) and post retirement (preservation).
- 2 Longevity Management the Role of Annuities favourable treatment of income derived from qualifying annuity products through the tax-transfer system could promote the take-up of annuities, particularly for low income earners. A greater role for annuities must not come at the expense of flexibility for superannuants.
- **3 Creating Scale** in-principle support for consolidation in the superannuation sector to support the participation of more Australian funds in the development of mega-projects.
- 4 Skilled Organisations and Advisers in-principle support for consolidation within the sector as a means of promoting the development of internal skills, knowledge and investment capacity to allow superannuation funds to better assess and leverage investment opportunities in infrastructure assets.
- **5 Bid Costs** development of a coherent national strategy to streamline the tender process, including further refining the take up and application of the National PPP Guidelines to promote inter-jurisdictional harmonisation and developing a workable solution to reduce the cost of bidding for major projects.
- 6 Consistency and Clarity in Government Priorities a commitment by Australian governments to develop certain, long-term (20 to 50 year), integrated land-use and infrastructure plans to provide a clear and transparent pipeline of future investment opportunities.
- 7 An Investment Pipeline enhancement of the existing national infrastructure pipeline to promote a comprehensive multi-sector list of projects, with a flow of larger-scale projects.
- **8 Investment Risk Profiles** a flexible approach to risk allocation, tailored to industry appetite for risks within a specific project.





2. Superannuation and Australian Infrastructure

There is a natural fit in terms of the long-term nature of those superannuation investments and the long-term nature of infrastructure investment ... Super funds themselves are telling us that when they talk to their superannuants ... they are very keen to see their funds invested here in nation-building. rather than overseas, or perhaps in equity markets.

THE HON ANTHONY ALBANESE MP, MINISTER FOR INFRASTRUCTURE¹

- 1 Albanese MP, the Hon Anthony (2008) 'Superannuation Funds Wary of Rudd's Nation-building Plan', The Australian, October 17, 2008, http://www. theaustralian.com.au/business/wealth/ super-funds-cautious-on-albanese-plans/ story-e6frgacf-1111117780318 last visited 3 December 2008.
- 2 Department of Finance Canada (2009) 'Canada's Economic Action Plan 2009: Annex 1 Economic Action Plan: Employment and Output Impacts', Budget 2009, http://www.budget.gc.ca/2009/plan/ bpa1-eng.html last visited 18 March 2010.
- 3 International Monetary Ffund (2009), 'Group of Twenty', paper prepared by the staff of the IMF for the G-20 Meeting of Deputies, 31 January 2010 - 1 February 2010. London.

2.1 - Linking Superannuation and Infrastructure

The symmetry between Australia's infrastructure investment task and our national retirement savings are obvious. Superannuation seeks the type of long-run, stable and strong returns which infrastructure assets provide. Yet to date, finding the structure to reconcile this match has eluded Australia's policymakers.

Delivering on this structure would deliver significant national benefits. Infrastructure investment has a well-established link to productivity gains. It has been conservatively estimated that each dollar of infrastructure investment boosts economic activity by between \$1.00 and \$1.60². The International Monetary Fund (IMF) estimates GDP multipliers from infrastructure investment measures range as high as \$1.80³.

But a deeper and more integral link connects superannuation and infrastructure.

Superannuation savings are the basis for the retirement incomes of millions of Australians. More than 60 per cent of Australians directly contribute to superannuation, with a substantial proportion of that investment used to finance the development of Australian industry. The average Australian superannuation fund allocates 29 per cent of its portfolio in Australian shares and 11 per cent in Australian fixed interest products.

The long-term financial prosperity of Australian retirees is therefore intricately linked to the financial health of the broader Australian economy and thus to the capacity of our infrastructure asset base.

In spite of the apparent linkages between infrastructure and retirement savings, infrastructure represents only a small proportion of the total investments held by Australian superannuation funds. A small handful of pioneering industry participants, including Industry Funds Management, the Motor Traders Association of Australia (MTAA) Fund, Hastings Funds Management, AMP Capital Investors and Victorian Funds Management Corporation, have all recognised the links and invested significantly in the sector.

These investments have been positive for beneficiaries of the client funds. However, it is clear that more must be done to address the barriers that have prevented concerted investment in infrastructure by the industry at large.

Many of the barriers faced by Australian superannuation funds in supporting increased investment in Australian infrastructure assets are common across the managed fund industry. It is therefore likely that strategies to support investment by superannuation funds could encourage a broader range of potential investors into the industry.

International superannuation, pension and sovereign wealth funds would also likely be encouraged to invest in Australian infrastructure assets as a result of targeted reforms which benefit Australian superannuation funds. It is desirable to use the reform of the Australian superannuation industry to provide a level playing field with international infrastructure investors and to promote sustainable commercial investment in nation building infrastructure projects.

The world's 20 largest sovereign wealth funds, including Australia's Future Fund, oversee the investment of approximately \$7.5 trillion in savings, providing a substantial pool of funds that could benefit the development of infrastructure in Australia.

2.2 – Australia's Infrastructure Industry

Australian governments at a local, state and Federal level face a significant challenge to finance and deliver the infrastructure that will underpin continued economic growth and social development. The challenges of rapid growth in population, forecast to exceed 37 million by 2050, the ageing of the population and the return of economic growth mean that capacity constraints in public transport, roads, freight and utilities will increasingly frustrate national economic and social objectives.

A range of reports have sought to quantify the levels of investment required for the development of new infrastructure. A 2008 report by ABN Amro (now the Royal Bank of Scotland) quantified Australia's infrastructure investment task at a conservative \$455 billion (in 2007 terms) over the next decade. Another report released by Citigroup in June 2008 estimated that the economic infrastructure investment task in the decade at more than \$770 billion (in 2007 terms), if the quality of capital stock was to return to a level that will sustain Australia's ongoing prosperity. The Citigroup research predicts a large demand on private sector finance, estimated to be around \$360 billion.

The most recent figures from the Australian Bureau of Statistics indicate approximately 47 per cent – or \$44.9 billion – of \$96.3 billion in construction activity during 2008-09 was infrastructure related.

The need for additional infrastructure investment is well established. The Queensland Government has committed to a \$124 billion South East Queensland Infrastructure Plan and Programme (SEQIPP) to 2026; while the Victorian Government has signalled its commitment to the delivery of a \$38 billion Victorian Transport Plan to 2017 and the New South Wales Government recently released the \$50.2 billion Metropolitan Transport Plan. However, large components of each of these plans remain unfunded, potentially challenging the ability of respective governments to deliver these projects without private investment.

Infrastructure investment is occurring at roughly half of the required rate to meet growing demand.

Despite the accumulating deficit in infrastructure investment, record capital investments are already underway at local, state and federal levels. Assuming necessary investment of \$770 billion over the coming decade, the pre-existing infrastructure deficit grew by approximately \$32.1 billion during 2008-09 and due to a forecast decline in total construction work in 2010-11 by \$9 billion on 2008-09 levels, will be compounded by a further \$41.1 billion in 2010-11.

It is clear that the solution to the national infrastructure investment shortfall will require that policymakers develop and implement frameworks that efficiently harness additional private sector capital and expertise in the development of infrastructure assets.

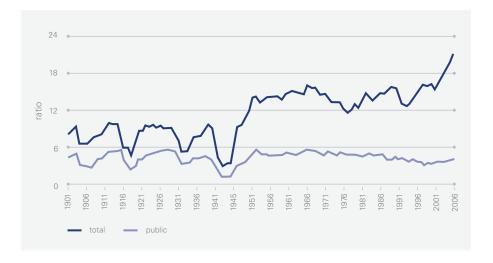
2.2.1 The Role of Private Finance

The significant role of private capital formation in delivering Australia's infrastructure is not a new phenomenon. Figure 1 shows that public capital expenditure has remained relatively constant over the past century, excepting the First and Second World Wars and the Great Depression. However, the spread between total and public investment shows that private infrastructure investment has been and is critical to building future capacity.

▼ Figure 1

Historical Investment in Australian Infrastructure (Private and Public Funds), 1901-2006

Source: Maddock & McLean (1987) for data from 1901 to 1981, ABS for data 1982-2005 & Treasury calculations from Infrastructure Partnerships Australia (2007) Australia's Infrastructure Priorities: Securing our Prosperity.



Government procurement models have developed significantly over the past few decades, providing new and innovative options to efficiently procure and finance assets and services from the private sector. The development of private infrastructure finance has led to the emergence of numerous models of hybrid public and private sector participation in infrastructure development, such as public-private partnerships. The introduction of new, innovative procurement models has contributed to rapid growth in the role of the private sector since the early 1990s.

Over recent years, the number of substantial private financing opportunities has averaged between three and five across all Australian jurisdictions per annum. The extent to which these models have been used has been sufficient to allow the development of considerable domestic industry; however the limited flow of deals has presented a barrier to market entry for both domestic and international market participants. Principally, this has occurred as the flow of deals has been insufficient to warrant the deployment of permanent skilled resources to Australia to facilitate more active market participation.

Despite the increased role for the private sector in contributing to infrastructure development over the past two decades, the infrastructure deficit continues to grow. Governments must recognise that more must be done to better harness the potential for private sector investment. Government balance sheets are already constrained; therefore in order to meet the substantial funding gap, approximately \$20 billion per annum, government and industry will need to consider more innovative methods for engaging private capital or else risk new or growing infrastructure bottlenecks.

2.2.2 Innovative Financing — Private Delivery of Public Assets

One of the most important developments has been the introduction of modern Public Private Partnership models for the delivery and whole-of-life management of public infrastructure.

Under the PPP model, the private sector contributes the equity involved in the development of the project and works in partnership with the procuring government for the long-term strategic management of the asset under a concession arrangement. On expiry of the agreement, the concession reverts to the public sector, which assumes the management and operation of the asset.

PPPs involve the private sector being responsible for a combination of roles such as the design, construction, operation, financing and long term ownership risks of capital assets for, or used by, the public sector. It is the transfer of the respective risks to the party best able to manage each risk, combined with the discipline and analysis of private financing, which makes PPPs a more effective model in appropriate circumstances.

Significantly, PPPs require a different role for government. Government becomes the customer as opposed to the developer and the role of government becomes that of a contract manager. The government defines the deliverables for the project, key outcomes and regular progress monitoring opportunities, while the private sector is given the freedom to innovate with the design and method of delivery. The ability of the private sector to apply innovation to the project is the source of the major efficiency developments.

PPP procurement is a mature model and it has been overwhelmingly successful in delivering high quality, innovative and value-for-money infrastructure for use by the Australian public. Work undertaken by Infrastructure Partnerships Australia, the United Kingdom Treasury and others, such as Probitas Partners, has observed PPPs around the world deliver lifecycle cost savings of around 30 per cent, with 75 per cent of those savings occurring in the design and build phase and 25 per cent in the operational phase of the asset.

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2.3 – Australian Superannuation Funds

Australia's superannuation industry has not been immune from the impacts of the Global Financial Crisis. During early 2007, Australia's pool of superannuation funds were estimated at \$1.2 trillion, but dwindled after the crisis to \$800 million. This variation represented a decline of one-third of the sector's total value in less than one year.

More recent analysis suggests some funds may have recovered to 2007 levels, however, the experience of 2007-08 clearly demonstrated the significant exposure of Australian superannuants to market volatility. The impacts of this variation on the retirement savings of some Australians has been sufficiently substantial to warrant further consideration of the desirable level of risk exposure for funds.

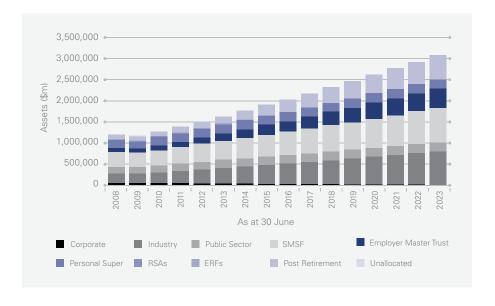
Despite a contraction of funds under management, the substantial pool of savings represents one of the world's largest asset pools. Australia boasts the fourth largest pool of investment funds (surpassed only by the United States, Luxemburg and France). Australia also enjoys access to the fifth largest pool of superannuation funds, behind the United States, the United Kingdom, Canada and the Netherlands.

The Allianz Global Report forecast that Australia's superannuation will remain the largest pension market in Asia to 2015; while Rice Warner estimated that the total pool of savings within the Australian superannuation market will reach \$3.2 trillion by 2022 under current policy settings.

▼ Figure 2

Forecast Growth in Australian Superannuation Funds Pool of Savings, 2008-2023

Source: Rice Warners (2009)



2.3.1 Infrastructure Investment by Australian Superannuation Funds

A number of Australian superannuation funds have an established investment history in infrastructure in Australia and abroad. Several Australian industry participants including Industry Funds Management, Victorian Funds Management Corporation, the Motor Traders Association of Australia (MTAA) Superfund, AMP Capital Investors and Hastings Fund Management are significant infrastructure investors.

The growth in infrastructure as a proportion of total superannuation fund investment has occurred in response to a number of factors; including increased opportunities for private finance, strong financial performance of infrastructure assets, an increased recognition of the role of the investment class within the portfolios held by some funds and a desire to better match liabilities to assets.

A significant number of superannuation funds, and their managers, are recognising the relative strengths of infrastructure investments, indicating an intension to manage infrastructure investment through discrete allocations (Figure 3).

▼ Figure 3

Australian Superannuation Fund Infrastructure Allocations, 2009

Source: Macquarie (2010)⁴ and Pregin (2009)⁵

Superannuation Fund	FUM (A\$b)	Current Infrastructure Allocation (% of FUM)		Target Infrastructure Allocation (% of FUM)					
		Unlisted	Listed	Direct	Total	Unlisted	Listed	Direct	Total
Ausfund	0.5	n/a	n/a	n/a	n/a	10.0	n/a	n/a	10.0
Aus Gov Super Fund	3.5	n/a	n/a	n/a	6.7	n/a	n/a	n/a	n/a
AustralianSuper	31.9	10.3	0.3	0.7	11.3	9.0	0.3	2.0	11.3
BUSS(Q)	1.5	11.1	3.0	-	14.1	n/a	n/a	n/a	n/a
CARE Super	3.6	n/a	n/a	n/a	6.0	n/a	n/a	n/a	n/a
Catholic Super Fund	2.8	n/a	n/a	n/a		5.0	n/a	n/a	5.0
Cbus	12.9	n/a	n/a	n/a	14.0	n/a	n/a	n/a	n/a
FIRSTSUPER	1.3	n/a	n/a	n/a	n/a	7.5	-	-	7.5
Health Super	7.4	n/a	n/a	n/a	4.6	n/a	n/a	n/a	n/a
HESTA	12.9	n/a	n/a	n/a	n/a	n/a	n/a	n/a	10.0
HOSTPLUS	6.5	n/a	n/a	n/a	4.0	n/a	n/a	n/a	8.0
Military Super Fund	2.8	8.6	-	0.4	9.0	n/a	n/a	n/a	n/a
MTAA	5.0	n/a	n/a	n/a	30.0	n/a	n/a	n/a	25
QIC	64.0	n/a	n/a	n/a	4.0	n/a	n/a	n/a	n/a
SunSuper	12.8	n/a	n/a	n/a	n/a	n/a	n/a	n/a	7.5
UniSuper	23.0	n/a	n/a	n/a	n/a	n/a	n/a	n/a	6.5
VICSuper	6.1	n/a	n/a	n/a	5.5	n/a	n/a	n/a	n/a
WestScheme	2.5	4.6	-	n/a	17.9	n/a	n/a	n/a	n/a

⁴ Macquarie (2010) 'Superannuation Fund Investment in Australian Infrastructure' Macquarie, 3 March 2010

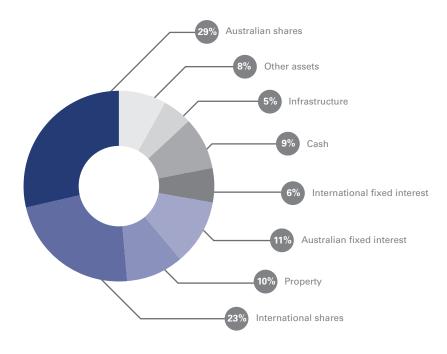
⁵ Preqin (2009) 'The 2009 Preqin Infrastructure Review', www.preqin.com, last viewed 17 March 2010

This role for funds as infrastructure investors has grown steadily as the industry has grown and matured. In 2002, listed and unlisted infrastructure constituted on average just two per cent of total superannuation fund investments and was forecast to rise to five per cent by 2012. In 2008, four years earlier than forecast, the average infrastructure investment passed five per cent in 2009, and is now thought to be as high as six per cent (Figure 4).

Despite the trend towards greater infrastructure investment by some funds, supported by their managers, a practical upper limit on the proportion of an individuals fund's total asset value exists. Liquidity requirements and risk-return characteristics of strategic asset allocations for a typical retail master trust fund, dictate that direct infrastructure investment should represent between 5-15 per cent of a funds allocation.

▼ Figure 4

Average Australian Superannuation Fund Investment Distribution, 2008 Source: Rice Warner (2009)



Infrastructure investment by Australian superannuation funds is currently estimated at between \$40 billion and \$65 billion. Australian superannuation funds continue to investment in both green field and brown field infrastructure opportunities in Australia. Recently, this has included the Wonthaggi Desalination Plant, Peninsula Link and in the near future will likely include Brisbane Airport Runway Upgrade and the Queensland asset privatisations, among others.

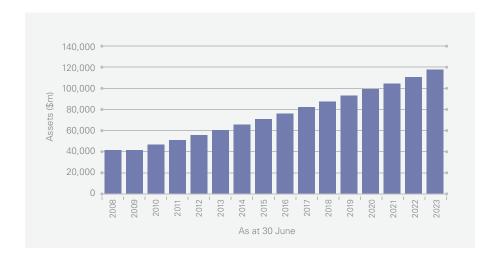
However, a substantial proportion of this investment occurs offshore. For instance, over the past four years, at least five investors representing Australian superannuation funds have invested over \$10 billion in water assets in the United Kingdom.

Assuming the continuation of existing investment distribution across asset classes, the value of investment in infrastructure by superannuation funds is forecast to increase to more than \$120 billion by 2023. This investment represents a forecast \$60 billion in new investment by 2020 or \$6 billion per annum, around 7.5 per cent of the investment required by the sector over that period (Figure 5).

▼ Figure 5

Projected Infrastructure Asset Values, 2008-2023

Source: Rice Warner (2009)



If superannuation is to play an increased role in meeting the substantial funding gap between current investment and the necessary funding to meet the growing demand for infrastructure, it is critical that the level of superannuation investment in infrastructure is substantially lifted. For instance, if funds lifted their infrastructure allocations to the commonly held upper limits of fund value, for instance 15 per cent, a further \$240 billion could be made available to the infrastructure sector over the coming 13 years, approximately \$18 billion per annum.

In order to make a substantial impact on the infrastructure deficit, it is critical that increased superannuation investment is seen in new domestic, green field assets. This will only be achievable if governments and project sponsors are able to offer a risk-return profile that is more closely matched the expectations of superannuation funds, and their managers. Historically, superannuation funds have been unwilling to participate in green field projects due to development risks. The unwillingness of superannuation funds to actively participate has been particularly notable prior to the identification of the preferred bidder, due to the substantial bid costs.

2.4 - International Pension Funds

International pension funds have a long history of investment in infrastructure. Several large Canadian funds have developed active market positions through their investment in listed funds and more recently, direct investments. Several United States based funds invested significantly in power assets both in their domestic market and internationally; and Dutch funds have invested through listed and unlisted funds, developing an active role in the international market.

Largely in common with the Australian experience, investments from international funds have avoided a strong role in green field assets either in Australia or abroad. Some industry estimates place green field investment by international funds at between 10 per cent and 20 per cent of their total infrastructure portfolio. In contrast to the European and American experience, Asian Pension funds have indicated a desire and capacity to take an active role in the development of green field assets, even taking active sponsor roles.

More recently, a number of international pension funds, such as Canada's Ontario Teachers Pension Fund and the Canadian Pension Plan, have signalled their desire to expand their direct infrastructure investment, particularly in Australia.

During the 1990s and 2000s, the relatively high volatility of traditional investment classes (equities, cash, bonds and real estate) coupled with a desire to better match liability exposures to asset holdings, drove the initial focus of international pension funds on alternative asset classes, including infrastructure. The driving principle of this shift in investment focus was to provide protection against market and interest rate volatility and inflation. This has been achieved through the identification of new sources of return and a better diversification of investment.

International pension funds, particularly Canadian-based entities, have subsequently developed considerable investment allocations to infrastructure assets. The allocations of Canadian funds are roughly equal to those of the most active Australian-based funds, and significantly above many of those based in European and the United States.

This shifting focus has seen a transfer of funds to Australia through substantial investment in Australian infrastructure assets, including toll roads, airports and utilities. This investment has been welcome and has played a critical role in supporting the development of a competitive infrastructure marketplace, including the emergence of a secondary infrastructure market.

Beyond Australia, the OECD has observed that the experience of pension funds in international infrastructure has not been entirely positive one. One point of view infers that some funds have been negatively impacted by changing costs of debt associated with the 2007 economic downturn. The Global Financial Crisis resulted in a small number of asset owners divesting their investment in specific assets to deleverage, in turn driving assets to the secondary market.

Concerns that the inflow of assets to the secondary market would drive reductions in asset prices have failed to materialise. Despite concerns regarding negative impacts on asset values as a result of the financial downturn, there has been little evidence in Australia and abroad to suggest the increased volume of assets available on the secondary market has resulted in depressed asset values. This has been supported by the action of debt providers, namely banks, which have been willing to allow debt covenants to be breached without forcing asset sales.

The infrastructure sector acknowledges frequent short-term (quarterly or more) revaluations of assets are undesirable for superannuants and industry. Short-term reductions in asset values at the height of the financial downturn, reflecting financing conditions at that time, would not adequately reflect long-term asset price trends, and therefore could provide a false impression of asset value. The flip-side of a long-term investment horizon is reduced asset liquidity and therefore barriers to disposing of assets. The relative illiquidity of unlisted assets must therefore be matched by its own premium.

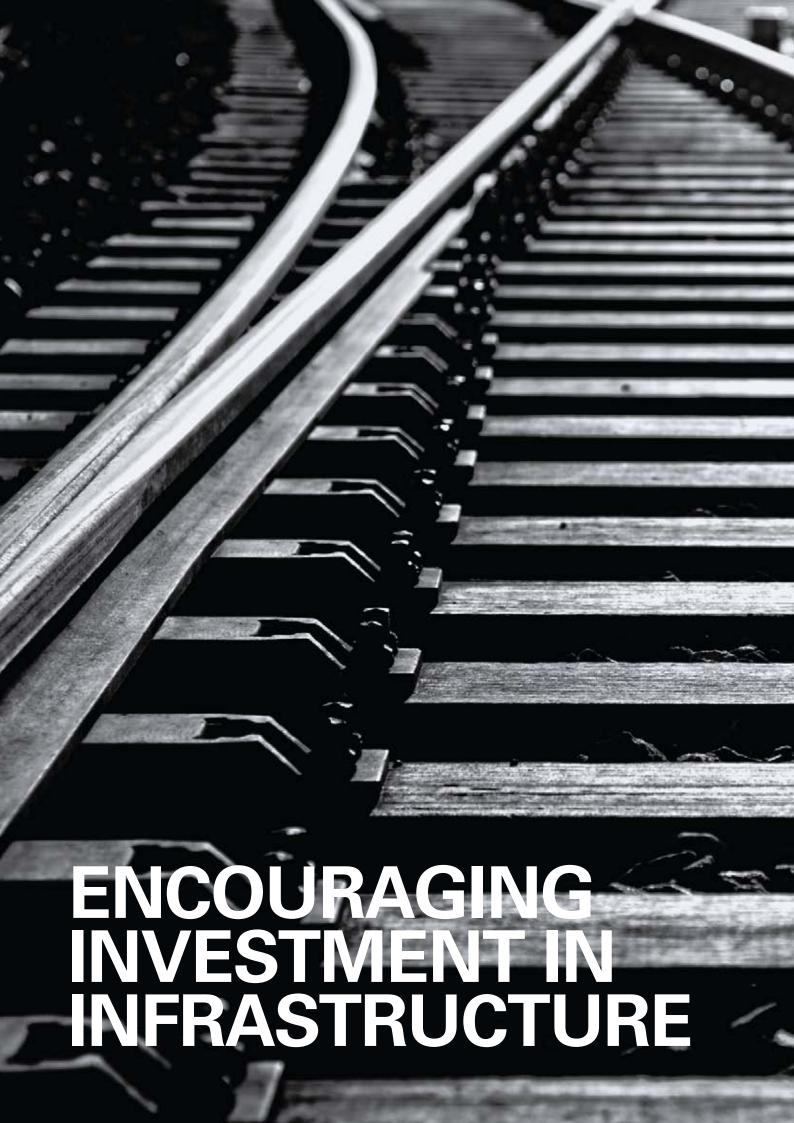
It is likely that the long-term impacts of the Global Financial Crisis on debt markets and in turn long term infrastructure asset values have not fully run their course. The potential for asset revaluations remains however it is clear that the impact of these revaluations will be at the lower end of the early expectations during the Global Financial Crisis. However, considerable uncertainty still exists.

▼ Figure 6

Institutional Investor Allocation to Infrastructure, 2009

Source: Macquarie (2010)

Institutional Investor	Domicile	Total Assets (billion)	Target Infrastructure Allocation (per cent)
AlMco	Canada	CAD\$76	~10
bdIMC	Canada	CAD\$85	~10
CPPIB	Canada	CAD\$120.5	~10
Ontario Teachers Pension Plan	Canada	CAD\$106	8
OMERS	Canada	CAD\$48	15
Alaska Permanent Fund	USA	USD\$39	3
CalPERS	USA	USD\$246	3
CalSTRS	USA	USD\$169.2	0.5
Illinois State board of Investments	USA	USD\$11	5
Operating Engineers	USA	USD\$9.1	5
TRS	USA	USD\$106	~2.5
Washington State investment Board	USA	USD\$82	5
ABP	Europe	EUR200	2
BT Pension Scheme/Hermes	Europe	GBP35	1





3. Encouraging Investment in Infrastructure

The risk and return profile of many of these investment opportunities, the lack of a national pipeline of infrastructure projects and the complexity and disparate nature of bid processes, are preventing the nation's savings from being channelled into economic development.

GRAEME MCKENZIE, ERNST & YOUNG⁶

3.1 — Why Infrastructure?

Australian governments have correctly identified the need to prioritise infrastructure investment. This focus on increased investment recognises both the long-term shortfall in funding and unprecedented forward growth pressures.

Despite the desire of governments to support increased investment in economic and social infrastructure, the capacity of government to provide this investment is constrained. The sheer scale of the investment required is simply beyond the capacity of government balance sheets alone.

The typical investment profile for superannuation funds and the structure of infrastructure returns are closely matched, with infrastructure providing long-term, stable investments. Some of the most attractive characteristics of infrastructure assets to superannuation funds can be summarised as:

- Earnings stability and dependable revenue stream (particularly for brown field or regulated assets);
- Monopoly characteristics, reducing elasticity;
- Inflation linked returns;
- Long-term assets; and,
- Potential tax benefits, dependent on structure.

3.1.1 Infrastructure as a Discrete Investment Class

In the past, investors have not considered infrastructure as a discrete investment class, rather incorporating it with other private equity assets. A recent report by Ernst & Young found that over 47 per cent of active investors now treat infrastructure as a separate investment class, with 43 per cent classing it as private equity and 10 per cent treating infrastructure as they do real estate⁷.

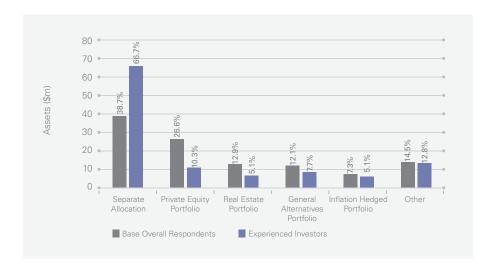
In its November 2009 *Infrastructure Market Review and Institutional Investor Survey,* Probitas Partners found experienced investors substantially favoured the treatment of infrastructure as a separate investment class.

- 6 Blue, Tim and Berkovic, Nicola (2009)

 'Superannuation funds spurn local
 infrastructure investment' The Australian,
 23 November 2009, http://www.
 theaustralian.com.au/superannuationfunds-spurn-local-infrastructureinvestment/story-e6frg8zx1225801840386
 last viewed 17 March 2010.
- 7 Inderst, G (2009) 'Pension Fund Investment in Infrastructure', OECD Working Papers on Insurance and Private Pensions No. 32, OECD Publishing.

Portfolio Classification of Infrastructure Assets, 2010

Source: Probitas Partners (2009)8



The typical investment profile for superannuation funds and the structure of infrastructure returns are closely matched, with infrastructure providing long-term, stable investments.

The maturing of the private infrastructure model and transparency of its specific characteristics and strong performance confirm that it should be more appropriately viewed as a discrete investment class.

Unlike private equity and real estate, the return profile of infrastructure assets is relatively stable. Assets procured under the social infrastructure or availability model (which do not transfer market risk to investors) provide a stable, transparent return profile during operation. Assets procured under an economic model PPP with demand risk (for example some toll roads) have a higher project risk and higher potential rewards. However, these risks appear to be realised in the first five years of operation, after which investors are likely to receive a more stable return, more closely reflecting the risk profile of social infrastructure model projects.

Increasingly, more seasoned infrastructure investors are now appreciating that infrastructure should rightly be considered not as a single investment class but as offering various risk pools, dependent on the class of asset (Figure 8).

Probitas Research (2009)

'Infrastructure Market Review
and Institutional Investor Survey',
Probitas Partners, November 2009

Comparison of the Characteristics of Various Asset Classes

Source: modified from Beeferman, Larry W. (2008)9

	Infrastructure	Institutional Bonds	Institutional Real Estate	Private Equity
Nature of Asset	direct: operating company dependent on control of large physical asset indirect: operating company	financial security	physical property	operating company
Asset Availability	volume: shallowunique often monopoly situations	volume: deep	volume: moderate-deep	• volume: moderate
Acquisition Dynamic	competitive tenders regulatory, environmental, social and political issues unlisted: often held over long-term listed: efficient, on- market transfer	efficient, on market transfer	competitive tender regulatory, environmental, social and political issues	competitive tenders management buy-out negotiated trade sale medium term exit strategy
Liquidity	listed: high, unlisted: low	 very high 	 moderate (dependent on sector) 	• moderate
Income	stable, inflation/GDP growth relative typically higher than bonds or real estate	• fixed coupon (dependent on interest)	• fixed or variable (dependent on interest rate and sector)	dominated by capital returns
Growth	 early stage: high, late stage: modest (dependent on asset stage) 	• low	 moderate-high (dependent on asset characteristics) 	high (dependent on asset characteristics)
Volatility	early stage: moderate late stage: low	moderate (dependent on market factors)	low-moderate	early stage: high, late stage: moderate (dependent on industry sector)
Typical Return Expectation per Annum Post Fees	mature portfolio: 7-10 per cent, development portfolio: - social infrastructure: 12 per cent - economic infrastructure 15 per cent	• ~5-7 per cent	 core: ~7-9 per cent, value-added: ~12-18 per cent, opportunity: >18 per cent 	diversified portfolio: >15 per cent

The resilience and stability of infrastructure investment has been tested during the recent economic downturn. All investment classes, including listed and unlisted infrastructure, experienced a downturn during the 2007 following the onset of the Global Financial Crisis. Analysis by Rice Warner indicated that during 2007, all investment classes experienced a reduction in value but infrastructure outperformed most other investment classes.

⁹ Beeferman, Larry W. (2008), Pension Fund Investment in Infrastructure: A Resource Paper' Capital Matters, Occasional Series Paper No 3, Pensions and Capital Stewardship Project Labor and Worklife Program Harvard Law School, December 2009.

Major Investment Class, Change in Valuations 2006-2007

Source: Rice Warner (2009)

Investment Class	Change in Value (Per cent)
Listed Infrastructure	< 26
Unlisted Infrastructure	<12
Australian Shares	<20
International Shares	<27
Private Equity	<17
Listed Property	<42
Unlisted Property	<12

The performance of infrastructure, particularly unlisted assets, has been among the most stable during the recent financial downturn. Only unlisted property offered the same resilience to declining asset values. Listed infrastructure, like all assets with relatively high liquidity, fared less well. However, of listed asset classes, only Australian shares driven by stability in the banking and resources sectors, outperformed infrastructure.

3.2 — Creating Attractive Investment Products

The superannuation sector has maintained its willingness to support investment in infrastructure as a distinct asset class, assuming a capacity to do so on commercial terms.

Despite the relative attractiveness of infrastructure as an investment class and the apparent match with the desired investment profiles of superannuation, several barriers exist to superannuation fund managers investing efficiently and profitably in infrastructure assets. For instance, investment in unlisted infrastructure – particularly green field economic assets – requires the expertise of highly skilled staff to support due diligence; the bidding process itself is complex and costly; and there is no quarantee of success.

In order to encourage greater investment by superannuation funds, a key consideration must be the creation of attractive investment products for both superannuation fund managers and individual superannuates which encourage investment in infrastructure. In order to better assess the necessary changes to the structure of current infrastructure deals in order to attract superannuation funds it is important to consider:

- **How super funds invest** the characteristics of investment such as debt or equity, listed or unlisted, primary or secondary market, direct or indirect.
- The desired return profiles of investment low risk, stable returns or higher risk, stronger returns.

Specific strategies to address the various challenges acting as a barrier to further investment are discussed in more detail in section 4.

3.2.1 How Super Funds Invest

As a single asset class, infrastructure offers the capacity to provide a broad number of investment vehicles ranging from debt to equity and from revenue-risk to guaranteed returns. Investment models available within the infrastructure sector are as numerous as the types of projects themselves.

Despite the obvious value, the flexibility of investment has historically acted as a barrier to superannuation funds that have not possessed the necessary internal skills, resources or expertise to assess and respond to investment opportunities.

Australia has a strong and irreplaceable managed funds industry. Managers have and will continue to play a critical role in providing skills, scale and resources to superannuation funds to enable investment in infrastructure assets. However, in order to maximise the potential for superannuation funds to fully match the risk-return profiles of their investments to their desired returns and to help meet the infrastructure shortfall, direct investments must also take a more significant role.

The clear message from the superannuation industry to the infrastructure sector has been that investment will follow the development of a pipeline of attractive deals utilising a variety of investment vehicles.

Recent experiences from the sector, such as the Wonthaggi Desalination project in Victoria saw several superannuation industry participants (UniSuper, AusSuper and Industry Funds Management) join clubs of debt providers to support the project. Such developments show that the paradigm may be shifting.

New, innovative investment approaches by superannuation funds provide an opportunity for a more comprehensive engagement of superannuation funds in the full suite of infrastructure financing solutions. A critical step will be to ensure a large component of the skills and resources necessary for the identification of investment opportunities are internalised by superannuation funds. This will be a critical step in ensuring the ongoing successful engagement of superannuation funds in the development of bids.

In order to encourage investment, it is necessary to change the way infrastructure funds invest to support a variety of investment models tailored to the specific return profile expected by each fund or investment product.

Industry and government will need to work cooperatively to identify and support the provision of sufficient opportunities for investment from superannuation funds across the variety of products, including:

- **Debt or equity investments** the Global Financial Crisis has resulted in a substantial contraction of global debt markets. Superannuation funds have used this opportunity to establish a toe-hold in debt provision to the infrastructure sector
- **Direct or indirect** traditionally superannuation funds have largely invested indirectly in infrastructure. This approach recognises the substantial skill and

knowledge requirements necessary to take and active, hands-on role in the operation of an asset. However, a small number of Australian funds are increasingly investing directly in assets.

- **Listed or unlisted assets** unlisted infrastructure assets offer long-term stable, return profiles that closely match the assumed return profiles of superannuation funds. However, by their nature, unlisted assets are inherently illiquid. Listed infrastructure more closely mirrors the profile associated with other equity products.
- Primary or secondary market the primary market for infrastructure, that is
 during the pre-tender or planning phase, offer the potential for strong returns
 reflective of the relatively high levels of risk associated a project during these
 phases. While these return profiles may be desirable for some funds during the
 accumulation phase of superannuants, the predictable, low risk, stable nature of
 secondary market investment obviously matches the conservative return profiles
 sought by many funds.

3.2.2The Desired Risk-Return Profiles of Investment

The superannuation industry in Australia remains in relative infancy. Although there have been substantial increases in the levels of retirement savings held by most Australian households, the Association of Superannuation Funds of Australia (ASFA) Retirement Savings Update (February 2008), found "it is clear that most retirees will need to substantially rely on the Age Pension in their retirement". Recognition of insufficient retirement savings is reflected in the prevailing underlying focus on fund accumulation by superannuation funds. This focus is reflected in the investment decisions of funds which have historically focused on building fund scale through a relatively aggressive investment focus.

While the proportion of people transitioning from the workforce to retirement who are self-funded retirees is steadily increasing, the overwhelming majority of superannuants remain either in the workforce and therefore focused on fund accumulation, or as part-pensioners who hold insufficient superannuation savings to meet their retirement needs.

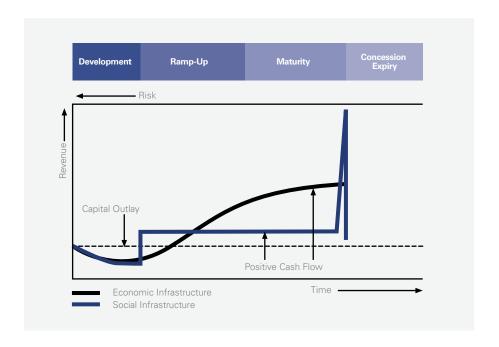
As a greater proportion of superannuants transition from pre-retirement accumulation to post-retirement, a new focus on savings preservation has begun to emerge. This has shifted the revenue expectations of superannuation trustees from a relatively aggressive high growth model to a more conservative stable profile. This trend is particularly evident where superannuants have accumulated substantial savings during their working lives and have sufficient retirement income assuming their funds have been securely managed. This is likely to grow in line with the ageing of Australia's population.

As a result, desired return profiles of Australian superannuation funds will shift to more closely mirror the conservative approach of international pension funds, matching revenue profiles derived through direct infrastructure investment. It is logical that infrastructure can play a much greater role in facilitating the shift of funds toward a conservative preservation focus.

Unlike many other investment classes, infrastructure has a clear lifecycle that lends itself to a variety of return profiles. The revenue curve – typically known as a J-curve – is characterised by a high upfront injection of revenue followed by the potential for strong initial returns that flatten out over time until concession expiry (Figure 10).

▼ Figure 10

The Typical Infrastructure Public Private Partnership Return Profiles



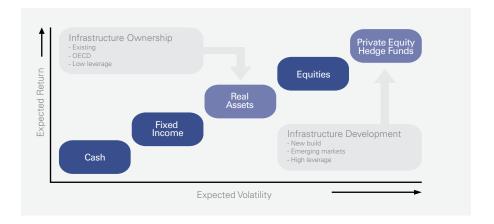
A particularly rapid period of growth in infrastructure investment during the decade preceding 2007 coupled with a few high profile toll road PPP failures has seen Australia's infrastructure market develop an atypical reputation as a relatively high risk, high revenue investment. This contrasts with the international experience of a stable investment class.

Recovery of risk appetite and expectation post Global Financial Crisis will likely correct many of these market distortions. However, this experience has seen the emergence of a two-tier infrastructure market. The primary market has largely constituted of equity funds and some constructors. These investors have specialised skills in the management of risks during the development phase and ramp-up phase of the projects lifecycle. As the focus has largely concentrated on these short-term, high risk phases, expectations of return have been similarly high.

The development of the secondary market has also been characterised by the emergence of key investors, these have largely included long-term asset owners such as operators, some superannuation funds and other long-term investors. These investors are naturally long-term asset holders with a focus on lower but more stable margins.

Infrastructure Risk/Reward Profile

Source: Lazard (2007)



The development of a two-tier market is a phenomenon that naturally benefits the conservative investment focus of superannuation funds, particularly those without the skill, knowledge or resource levels required to access the primary market.

The development of a secondary market for assets is important, but it does not answer the national objective of securing superannuation savings in long-term asset ownership from the development phase. Obviously, a long-term engagement of superannuation in the role of project sponsor and long-term asset owner is a desirable public policy and project aim. The characteristics of the different infrastructure markets are discussed in Figure 12.

▼ Figure 12

Characteristics of the Infrastructure Market

Source: modified from Probitas Partners (2007)¹⁰

Infrastructure	Asset Characteristics	Investment Duration	Expected Internal Rate of Return (IRR)
Primary (Greenfield)	 Design, build and operating risk Similar to traditional private equity High debt levels Significant risks 	• 3 to 5 years, then sold	• >15 per cent
Secondary (Brownfield)	 Well established assets with known cash flow, similar to A-1 commercial real estate Common monopolistic characteristics Debt levels reduced Risk minimal 	• 15 to 30 years	• 10-12 per cent
Brownfield plus Capital	Existing assets that require new investment	• varies	• 12-15 per cent

¹⁰ Probitas Partners (2007) "Investing in Infrastructure Funds", Probitas Partners, September 2007

In order for internationally active organisations to commit finite resources to the Australian marketplace it is necessary to provide a predictable and ongoing pipeline of work to encourage offshore companies to retain global resources and a domestic workforce in Australia.

Risk and return profiles of infrastructure assets can vary substantially depending on the sector where the asset is located. Highly regulated sectors and those with established revenue profiles, such as an operating toll road), social infrastructure assets, or assets featuring long-term government or fixed contracts (such as Power Purchase Agreements, each offer relatively low returns because they have little associated risk. By contrast, assets which contain a degree of risk or full market risk such as rail, airports and seaports offer higher rates of return.

As a result of their low risk-return profiles, some asset classes more naturally lend themselves to investment by superannuation funds. However several Australian and many global funds have derived significant advantage from investments in assets, both domestically and abroad, such as toll roads, airport and seaports, which are notionally higher risk exposed assets.

▼ Figure 13

Risk and Reward Characteristics of Infrastructure Asset Sector Source: modified from Beeferman, Larry W. (2008)

Asset Sector	Risk	Average Cash Yield (years 1-5)	Average Leveraged Internal Rate of return (IRR)	Capital Appreciation Potential
Toll Road (Operation Phase)	Low	4-8 per cent	8-12 per cent	Limited
Private Finance Initiatives (PFI)	Low - Medium	6-12 per cent	9-11 per cent	Limited
Regulated Assets (Pipelines, Energy Distribution and networks)	Low - Medium	6-10 per cent	10-15 per cent	Yes
Rail	Medium	8-12 per cent	14-18 per cent	Yes
Airports/Seaports	Medium	5-10 per cent	15-18 per cent	Yes
Toll Road (Development Phase)	Medium-High	3-5 per cent	12-20 per cent	Yes

3.3 — Creating a Stable Marketplace

A key consideration in encouraging active involvement in infrastructure by the superannuation industry is the development of a stable, transparent and fully functioning national infrastructure market. A functional and transparent infrastructure market will encourage superannuation funds to retain in-house infrastructure expertise.

The trend in Australia has been toward mega projects at a value of more than \$1 billion. Projects like the National Broadband Network, the recently cancelled metropolitan rail projects in Sydney, the Wonthaggi Desalination Plant and Brisbane's AirportLink Motorway required substantial investments above \$2 billion. These globally significant projects compete against other projects across the world, making a transparent planning and prioritisation process and a transparent procurement process essential to attracting capital to Australia's infrastructure market.

Of course, a stable, transparent market and certain project pipeline is as fundamental to attracting superannuation as it is to retaining and attracting constructors, financiers and other disciplines within the sector. A more functional national market will naturally drive greater competition and better value for money outcomes.

The recent sovereign risk issues around some state government's projects – most notably the CBD Metro project in Sydney has undoubtedly damaged Australia's global reputation; and without redress, could impact on the ability of Australian governments to fund future projects.

Renewed commitment from government to avoid project scope or delivery timetable variations is an urgent and critical challenge to ensuring the proper functioning of the national infrastructure market.





4. Addressing the Barriers to Further Investment

Nobody would expect superannuation funds to take unacceptable risks or accept uncommercial returns. I certainly would not contemplate government either strong-arming super funds or interfering with their investment decisions. I do. however, believe that we should remove anv obstacles to super funds investing in Australian infrastructure projects. We need to see whether there are any obstacles which can be removed to help make longterm investments in infrastructure projects a more attractive proposition.

THE HON KIM BEAZLEY MP, (THEN) LEADER OF THE OPPOSITION¹¹

4.1— Understanding the Barriers

The domestic superannuation industry has signalled an unambiguous desire to expand its investment in Australian infrastructure. However, creating the preconditions for further investment will require concerted action by the government as well as the infrastructure and superannuation sectors.

Two key initiatives are the creation of superannuation products which better match infrastructure's revenue and risk profiles; and the creation of a stable, transparent and accessible infrastructure market.

Achieving this will require a number of specific actions that government and industry must work closely together on to understand and address:

- · A near singular accumulation focus from many funds;
- . An insubstantial consideration and offering of annuity products;
- . A proliferation of smaller less efficient funds;
- · Insufficient internal expertise in infrastructure;
- · Complex and expensive bid processes;
- Lack of transparency about the project pipeline and investment opportunities;
- Constraints caused by the mismatch of unlisted infrastructure and portability and liquidity requirements;
- The need for a project-by-project consideration of risk allocation;
- Inadequate long-term integrated infrastructure planning; and,
- Limited range of projects to match a diversified appetite for risk.

4.2— Refocusing Superannuation to Lifecycle Phases

The sole aim of the superannuation system is to provide retirement incomes to beneficiaries. It is therefore critical that superannuation products match the income needs of superannuants.

¹¹ Beazley MP, the Hon Kim (2005) 'Speech to the Australian Council for Infrastructure Development (AusCID)', 1 March 2005.

Infrastructure Partnerships Australia supports the trend towards choice for superannuants in retirement savings. Reforms to promote choice in fund selection should be extended to include active government support for the provision of annuity products. The report by the Australia's Future Tax System Review Panel (the Henry Review) into the Retirement Income System recommended eight key reforms, two of which are particularly relevant to consideration of the role of superannuation funds in financing infrastructure:

- Improving the ability of people to use their superannuation to manage longevity risk; and.
- Improving the awareness and engagement of individuals with the retirement income system.

In addition, the report recommended lifting the eligibility age for the age pension and therefore access to superannuation savings to 67. Lifting the retirement age will mean the average superannuation product will be required to support each Australian male for 14.5 years of retirement and the average female for 19.5 years¹². It is also likely this will increase marginally over time.

The current reform process provides the opportunity to transition the superannuation sector to a mature footing. A potential component of this reform process should be an industry and government policy focus on encouraging a three-phase approach: preretirement, retirement and post-retirement.

A three-phase approach to superannuation investment would allow the development of financial products and services specifically tailored to each of the phases. For instance, pre-retirement accumulation phase products would focus more aggressively on accumulation; while post-retirement products could take a more conservative, preservation approach, focused on the provision of annuities.

As recognised by the Henry Review Panel, effective communication will be critical to the success of any reforms to the established superannuation sector. Significant proportions of superannuants are disengaged from the savings process and may therefore be exposed to unnecessary or undesirable risks. The second retirement phase could focus on education to assist superannuants to plan adequately for retirement.

During this second phase, fund members would be entitled to receive government accredited financial advice outlining the industry's structure, the role of various general product streams (for instance annuity versus account—based products) and the types of government assistance available. Consideration should be given to the potential for these services to be provided through accredited private sector advisors, or alternatively leveraging the established Centrelink Financial Information Service.

The sole aim of the superannuation system is to provide retirement incomes to beneficiaries. It is therefore critical that superannuation products match the income needs of superannuants.

The life expectancy of the average Australian male regardless of their year of birth was 83.5 years, and 86.5 years for a female in 2004-05. Source: ABS (2009).

The third post-retirement phase would naturally focus on principal preservation. This phase could be assisted by an increased focus on a new suite of annuity products by funds. These products provide the opportunity to provide greater stability and certainty to retirement incomes, assisting to address longevity risks. The potential role of annuities is discussed further in Section 4.3.

The restructuring of the sector to reduce the focus on accumulation by funds would more closely match income risk-return profiles to the income requirements of superannuants. The restructuring of the superannuation market to focus on lifecycle phases offers the opportunity to both strengthen the capacity of the sector to deliver on its sole objective, the derivation of adequate retirement incomes for Australian retirees, will also encouraging investment in assets providing stable, transparent incomes, such as infrastructure.

4.3— Longevity Management – the Role of Annuities

Encouraging the take up of annuity products would be a significant step toward secure, stable and transparent retirement savings. The provision of long-term income security was recently considered by Professor Michael Sherris and Associate Professor John Evans in their paper Longevity Management Issues for Australia's Future Tax System, for the Henry Tax Review. This paper supported a greater role for annuities to support lifetime savings.

The paper presented a number of options for the structuring of annuity products and highlighted the major risks to the providers of annuity products, namely longevity risk as well as the inflation indexation risk for fully indexed life annuities. The private sector is well-placed to manage the risks identified by Sherris and Evans. For instance, various investment classes, such as infrastructure, provide significant protection from inflation and interest linked variations. Similarly, infrastructure provides a long-term investment horizon that frequently exceeds the average retirement income requirements of superannuants.

Recent public debate on strategies for longevity management has focus on the potential adoption by government of two strategies to support life-time, preservation-focused superannuation products:

- **Compulsory** A 'Medicare-style' product based on minimum mandatory contributions to a guaranteed income stream product; or,
- **Voluntary** Promotion of annuity products as a stable investment class, while maintaining flexibility for superannuants.

A shift toward a greater role for annuity products would be a positive step for Australia's superannuation sector, supporting long-term savings and promoting a judicious, long-term savings focus among superannuation fund trustees. The potential role for annuity products is particularly strong in the post-retirement phase, as discussed in Section 4.2.

Infrastructure Partnerships Australia supports a greater role for annuities. Annuities would lead to a much better match between superannuation and infrastructure life cycles. Industry has to address this issue and the Cooper Review provides a perfect forum for this issue to be resolved. The superannuation sector should embrace reform without fear of change.

The greater role for annuities must not occur at the expense of flexibility for superannuants. One option might be a regulatory requirement for annuity products to be offered. Several existing concerns of superannuants would also need to be addressed, such as:

- Maintaining flexibility to support product switching by engaged superannuants;
- Balancing lifetime and term product offerings; and,
- Appropriate circumstances for the release of remaining fund principal.

Obviously, the take up of annuity products by superannuants must be based on a product's intrinsic benefits and not by any requirement to hold a certain proportion of retirement savings in such products. Any compulsory Medicare-style annuity contribution would undermine existing reforms toward choice in retirement incomes and in the process and reduce the flexibility of superannuants to balance their own income expectations.

Favourable treatment of income derived from qualifying annuity products through the tax-transfer system, particularly for low income earners, could provide sufficient incentive to promote the take-up of these products without the requirement for a compulsory scheme.

The fluctuations in the pool of superannuation savings during the Global Financial Crisis have demonstrated the opportunity to provide greater certainty for the retirement incomes of Australians. Similarly the growing population of retirees, seeking conservative return profiles with their substantial superannuation savings is growing. The capacity for a greater role of annuities to assist in providing stable, transparent retirement incomes is unequivocal. Industry must work to develop an adequate response to this issue and the Cooper Review provides a perfect forum to resolve this issue.

4.4 — Encouraging Larger, More Capable Funds

The introduction of a range of commendable reforms to promote choice for superannuants has also led to a fragmentation of the industry. This has been followed in turn by a slow and ongoing process of fund rationalisation. It can be expected the current period of rationalisation within the sector will continue and accelerate over the short-term. Rice Warner estimates that over the past three years, the number of large (non-APRA) funds has decreased from around 800 to 500, with the trend to continue to 2013, again halving the number of large funds (Figure 14).

Annuities
would lead to
a much better
match between
superannuation
and infrastructure
life cycles.

Continuing amalgamation of funds and the resulting growth in the average size of funds is a positive outcome in terms of long-term sustainability. Amalgamation will likely provide the best financial outcomes for both superannuants and the infrastructure industry. Through promoting the development of scale within funds, several beneficial outcomes can be facilitated:

- Increased capacity for investment in large projects;
- Facilitation of diversified direct investment portfolios;
- · Supporting the development of an internal skill and knowledge base; and,
- Reduced fees and charges to superannuants.

As discussed in Section 3.3, the recent trend has been toward larger 'mega projects'. The capital requirements of these projects naturally require investors with sufficiently large balance sheets. The importance of balance sheet scale in facilitating superannuation investment is clearly demonstrated by the recent attempts by Canadian pension funds, the Ontario Teachers Pension Plan and the Canada Pension Plan Investment Board, to secure a \$6 billion takeover of Australian-based multinational toll road operator Transurban.

Fostering larger individual pools of superannuation funds would assist Australian funds to compete with international pension funds of similar scale to the US\$86 billion Canadian Pensions Plan or US\$76 billion Ontario Teachers. In 2008, the largest international pension fund is more than 50 times the size of Australia's largest private super fund, AustralianSuper (more than \$20 billion in assets), and 25 times the size of the Future Fund.

▼ Figure 14

Number of Funds by Size, 2008

Source: Rice Warner (2009)

Number of Funds by Size, June 2008								
Fund Size (\$m)	Corporate Funds	Industry Funds	Public Sector	Retail	Small APRA			
0-50	135	11	15	-	5538			
50-500	72	21	3	-	-			
500-1000	6	14	3	-	-			
1000-2000	6	5	4	-	-			
2000-5000	5	13	4	-	-			
>5000	4	9	10	-	-			
2008 Totals	228	73	39	174	5538			
2007 Totals	290	75	39	171	6017			
2006 Totals	555	81	44	192	6665			

▼ Figure 15

Number of Funds by Size, 2013

Source: Rice Warner (2009)

Estimated Number of Funds by Size, June 2013							
Fund Size (\$m)	Corporate Funds	Industry Funds	Public Sector	Retail	Small APRA		
0-500	25	-	-	-	2300		
500-1000	13	-	-	-	-		
1000-5000	16	12	6	-	-		
5000-10000	2	11	5	-	-		
10000-20000	4	8	4	-	-		
20000-50000	-	8	4	-	-		
>50000	-	1	1	-	-		
2013 Totals	60	40	20	100	2300		

Direct investment in infrastructure assets by superannuation funds offers the potential to both lift the returns that can be achieved through infrastructure investment by superannuation funds, and encourage the development of additional infrastructure projects. However, direct investments often require a relatively large equity contribution often outside the capacity of small funds. In order to facilitate multiple direct investments by funds, often sufficient scale must first be achieved to allow a diversified portfolio, whereby reducing risks to investors.

Larger funds offer the potential scale required to attract and retain skilled specialists to allow funds to operate as smart equity players in the bidding phase for large projects. Consolidation in the Australian superannuation sector will support these funds contributing to the development of larger projects.

While amalgamation is can be challenging for funds, the capacity to offer benefits for superannuants through new investment opportunities, better resourcing and reduced fees and charges, often outweighs any apparent challenges. Recent Australian experience demonstrates the opportunity for considered infrastructure investment that can accompany small funds amalgamating or working cooperatively through a third-party wholesale manager, such as Industry Funds Management.

Government should offer in-principle support for consolidation within the sector as a means to improve the capacity for efficient, effective investment.

4.5 — Skilled Organisations and Advisers

Infrastructure investment and development is a highly specialised field, requiring considerable skill and expertise in order to carry out commercial due diligence and leverage value. For infrastructure to be an active investment class for institutional investors, sufficient skills are required to understand how to align investment and revenue profiles, the risk associated with long-term asset lifecycles and assess value-for-money, particularly in green field assets.

Many Australian superannuation funds do not possess the level of specialised skills required to effectively invest in infrastructure, particularly direct investment in green field assets.

Although a considerable proportion of the necessary skills can be provided by consultants and other advisers, a sufficient skill base is required to scrutinise the work of advisers¹³. The use of external advisors can add additional costs, reducing the attractiveness of the asset class for investors.

The rationalisation of the sector and the development of increased scale within individual fund managers will ultimately also assist funds to access greater skills and knowledge. For smaller funds this will internalise the sufficient skill base to facilitate a more informed discussion with managers and advisers to ensure sound investments over the longer term. Larger, better resourced funds would ideally seek to internalise a more specialised set of skills and experience to facilitate direct investment in infrastructure assets.

Managers and advisers will continue to play a critical role in the sector moving forward. The role of managers in providing support for investment by small funds or funds with insufficient scale or skills to support direct investment, will be critical in ensuring the maximisation of superannuation's role in infrastructure investment.

Critical to supporting internal investment in the development of infrastructure specific skills will be the clear indication from government of the ongoing availability of opportunities for these skills to support investment decisions. Funds will be unwilling to investment in new skills and resources within a transparent, accountable and well informed pipeline of projects.

4.6 — Bid Simplification

Increasingly, the complexity and costs of bidding for major projects, particularly PPPs or alternative financing models, has of itself become a barrier to market entry. The infrastructure industry and government have worked constructively to address these issues however further work is required.

It is generally accepted that the cost of tendering equates to around one per cent of the contract price. For a \$4 billion project, bid costs are likely to be in the order of \$40 million. Few Australian corporations, including superannuation funds, have the balance sheet strength to participate in bids requiring this degree of upfront investment, without any guarantee of success. In order to promote active, green field investment by superannuation funds in infrastructure projects, the reform of the bidding process to reduce the non-design and construction costs borne by sponsors.

Opportunities for government reform include the reform of the procurement process to allow the transition to preferred bidder earlier. The release of competing consortiums at an earlier stage will allow the redeployment of these resources to other projects or opportunities.

Similarly, as a result of the Global Financial Crisis the financial resources available to the infrastructure sector remain highly limited. The relaxation or removal of the requirement

¹³ Ernst & Young (2009) The Trillion Dollar Question: Can Superannuation Boost Investment in Australia's Infrastructure?, Ernst & Young, Australia 2009

to provide fully underwritten bids would provide flexibility to the limited financial resources within the market to be deployed where they are required.

Without substantial skills and expertise, the development of project teams also requires long lead times and may require the assembly of joint venture teams or strategic alliances, the establishment of a large in-house bid team and expenditure on third party consultants for a range of services (including finance, design and engineering, environmental and legal services).

These concerns have been recognised by government at various stages and some attempt has been made to address the problem through the development of the National PPP Guidelines and other reforms to promote inter-jurisdictional harmony in procurement policy. However, further policy options should be explored to simplify and harmonise the existing tender process.

4.7 — Clarity in Government Priorities

In some jurisdictions, a lack of certainty about the progression of projects has become a major hurdle. Changing government priorities – manifesting in delayed and cancelled projects – has raised legitimate questions about the level of political will and whole-of-government commitment to the delivery of committed (and in some cases, partially procured) infrastructure projects.

The commitment of government to the development of long-term (20 to 50 year), integrated land-use and infrastructure plans is a fundamental plank in finally delivering pipeline certainty. A functional infrastructure plan would be characterised by:

- Details of the infrastructure required to support and respond to an accompanying mandatory 20-plus year strategic growth plan;
- A staged plan providing firm timelines for project delivery, in accordance with growth patterns and projections contained within the strategic growth plan;
- Integration with budget processes, including estimated project costs and any investment opportunities.
- Transparent frameworks that will drive rigour and transparency in project selection, sequencing, procurement and delivery;
- State priorities updated on an annual basis; and,
- The inclusion of measurable targets on which the jurisdiction's performance in project delivery can be examined.

Long-term planning and clear project staging is not an alternative for government priority identification. Project evaluation techniques should not undermine the capacity of governments to set the agenda of infrastructure development, particularly the prioritised investment of limited government resources across sectors – for instance, balancing the demands of health and education. Rather, long-term planning should be seen as an opportunity to communicate these relative priorities and to find the most efficient way to achieve the aims of government.

The preservation of an independent project identification process, underscored by rigorous and scrutable analysis of a project's economic, social and environmental contribution, is an essential component in the development of transparent long-term plans. A transparent and consistent infrastructure plan is critical to assisting industry deploy scarce and valuable resources in the way that will generate the greatest returns for government and industry.

Governments must also work to bring clarity to a range of major policy decisions, such as climate change, taxation reform and the future fuel mix of the national energy market. Each of these challenges, and others, provide considerable regulation risks to industry discouraging investment in key assets such as the next generation of electricity assets.

4.8 — A National Investment Pipeline

The development of a National Infrastructure Pipeline has been a significant step. The pipeline drafted by Infrastructure Australia is a sound basis for expansion and refinement to provide a more comprehensive, multi-sector, project-focused (as opposed to sector-focused) pipeline.

The pipeline should provide a comprehensive, multi-agency outlook of private sector opportunities across procurement models. The pipeline should also provide details on:

- Project size;
- Government contribution:
- Integration with the public process;
- · Timeframe for prior to issuance of request for proposal; and,
- Potential private sector engagement.

The development of a national pipeline should leverage the infrastructure plans and programmes of the various Australian Government departments and agencies, state and territory jurisdictions as well as large local governments (for instance, Brisbane City Council).

A national infrastructure pipeline would bring together projects contained in strategies like the Victorian Transport Plan and the recently announced Western Australian PPP pipeline, providing clarity on the relative national significance of the projects contained within each government's plans.

The importance of local government as a procurer and provider of infrastructure has been emphasised by the recent development of major road projects, such as Brisbane's Airport Link, Northern Link and Go Between Bridge, public transport, such as the Gold Coast Light Rail, and urban development, such as Parramatta Council's Civic Place PPP. The expansion of the pipeline to include a more formal contribution by local government would support the development of alternative procurement by that level of government.

Delivering a multi-jurisdictional national pipeline of project opportunities, coupled with attendant regulatory and procurement reform, will finally begin to deliver the kind of transparent, accessible national market that will of itself promote more efficient investment and provide incentives to foreign capital and Australia's superannuation funds to undertake the changes required.

Of course, the development of a considered, transparent infrastructure pipeline must be accompanied by an increase in the volume of projects that are brought to the market by government. A significant and growing infrastructure investment gap is evident in Australia. In order to ensure this gap can be met (and to provide the necessary incentive for superannuation funds to commit the necessary resources to infrastructure) the volume of projects coming to market will necessitate a three or four fold increase.

4.9 — Infrastructure Risk Profiles

As discussed in Section 3.1, desired risk-return profiles of superannuation funds closely match those of infrastructure assets. This should make infrastructure an intrinsically attractive investment for superannuation.

Despite these apparent links, coupling capital with desirable investment is a more considerable challenge that has limited the involvement of superannuation funds. However, the level of risk – particularly market risks, such as patronage (demand) and refinancing risks – transferred to private investors has become an impediment to greater superannuation investments.

The increased transfer of risk was driven by the availability of capital and strong competition among bidders. The Global Financial Crisis has reset risk appetites among both debt and equity providers. As a result, investors have signalled a reluctance to bid for projects which include a significant degree of market risk. In order to secure engagement from superannuation funds in the various project types that will be necessary to meet the current funding shortfall, government and project sponsors will need to approach the allocation of risk on a flexible, project-by-project basis.

Global Financial Crisis-led changes to the infrastructure market will likely foster a much closer alignment between the infrastructure and superannuation sectors on appropriate risk allocation and support a closer relationship to their mutual benefit. These changes will likely support reforms which more naturally suit the conservative nature of superannuation funds; and may facilitate their participation in consortia of like-minded investors.

Recent experience from Victoria, including the syndication guarantee offered to the winning consortium on the Wonthaggi desalination project and the availability toll road model that will be utilised on Peninsula Link, demonstrate the opportunity for government to maturely approach procurement decisions to secure access to finance in difficult market conditions, and to secure the participation of superannuation funds in doing so.





5. Conclusion

Fast-tracking the nation-building agenda can secure economic activity in the short term and expand growth potential in the medium-to-long term. Accordinaly. the Government will be looking to the superannuation industry to consider investina in infrastructure projects. In that context, we will be working with the industry to facilitate investment, where the business case stacks up.

SENATOR THE HON NICK SHERRY, (THEN) MINISTER FOR SUPERANNUATION Policymakers, industry and taxpayers have reached a consensus about the need for new and renewed infrastructure.

It is also clear that a business as usual scenario will not deliver the level of investment that will be required to bridge the infrastructure deficit. That means that Australia must look at new opportunities to better harness Australia's wealth of superannuation.

Government and industry need to work together to settle on the 'perfect match' between retirement savings and infrastructure.

Infrastructure provides long-term, stable and low risk returns, closely matching the revenue requirements of post-retirement superannuants. Reforms toward better access to annuity products will provide both better outcomes for superannuants and more closely align with the risk/return profile of infrastructure assets.

Further consolidation of small funds must also form a priority. Larger funds have the scale to better access complex, worthy investments like infrastructure. Consolidation of funds will also allow beneficiaries to access the inherent benefits from economies of scale – allowing funds to invest in unlisted and green field projects – driving benefit for fund members, while also driving national productivity.



