

GOING NOWHERE: THE RURAL LOCAL ROAD CRISIS ITS NATIONAL SIGNIFICANCE AND PROPOSED REFORMS

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CHAIRMAN'S INTRODUCTION

This paper seeks to bring a silent crisis to wider prominence. In so doing, it also hopes to offer genuine solutions to an infrastructure challenge of national significance.

The Australian Rural Roads Group (ARRG) nominally represents rural local governments nationwide producing over \$100 million in agricultural product annually. Together this group produces almost \$18 billion in agricultural product – almost half of Australia's total output. In other words, these are very productive communities that contribute significantly to national wealth. But the ageing roads that underpin their productivity are under threat from under-investment over many decades. These communities, like many others across rural Australia, are frustrated at being left to watch this crisis worsen.

Communities in rural Australia rely on the quality of their local roads to move their products and people safely and efficiently. Yet current local road funding levels are far from sufficient to achieve these objectives. Nationwide, our rural local roads are decaying badly. Collectively, Australia is billions of dollars short on the funds needed to maintain and ultimately replace this infrastructure asset in the years ahead. The precise size and shape of this nationwide problem is very poorly understood and what is worse, it is not being managed at a national level. Some local councils also lack the capacity to understand and manage their own road assets properly.

For the sake of Australia's ongoing agricultural productivity in particular, it is not enough for rural local roads to merely 'exist' on maps. They should be able to carry heavy freight efficiently. The most important roads for the freight task should be passable in most weather conditions, and be of a standard that

promotes good safety levels. Taken overall, Australia's current rural local road stock fails these tests, putting ongoing rural productivity and standards of living in question.

The ARRG presents this paper to promote *genuine reform*. The answer lies in more than extra road funding, although this is sorely needed: reform must also deliver structural change to how this nationally-significant asset group is planned, managed and funded across three levels of government.

This paper presents ten key pressures on rural local roads in some detail. Five comprehensive reforms to policy, funding and governance of these roads are then proposed in response to these pressures. Wider road tax and road policy reform directions are also examined in light of the five recommendations in this paper. It is encouraging to the ARRG that the proposed reforms in this paper appear to find favour with the direction of both the Henry Tax Review and Infrastructure Australia's recent transport infrastructure reform policies, as well as higher government efforts to build the asset management and planning capacity of local government nationwide.

It will take all three levels of government accepting some changes and working in collegiate fashion to resolve this problem, but the legacy of these efforts would be one of great benefit to the Federation.

John Coulton
Mayor, Gwydir Shire NSW
Chair, Australian Rural Roads Group
November 2010

STRUCTURE AND CONTENT OF THIS PAPER

THIS PAPER IS DIVIDED INTO 4 PARTS:

Part 1 – The Australian Rural Roads Group

A summary of this group of highly-productive rural local governments and their objectives for rural local road reform on behalf of all rural local governments nationwide, as well as a discussion of the importance of efficient and safe rural local roads for national productivity and the wellbeing of rural road users.

Part 2 – Going nowhere: 10 key rural local road pressures

An examination of the major pressures facing rural local roads from the funding, planning, management and reporting perspectives.

Part 3 – The road ahead: 5 key reforms for the better

5 considered reforms to the funding, management and reporting of rural local roads to begin to resolve this nationally-significant infrastructure crisis.

Part 4 – A consensus for reform

The ARRГ examines the wider Australian road policy and funding reform debate to establish the credentials of its own reform recommendations.

PART 1

THE AUSTRALIAN RURAL ROADS GROUP

What is the Australian Rural Roads Group?

The ARRГ is an alliance of productive rural local governments seeking genuine reform to rural local road infrastructure. The nominal ARRГ membership is 114 rural local government areas that each produced annual agricultural product of over \$100 million for the 2006 census year. In the most urbanised nation on earth, the membership represents:

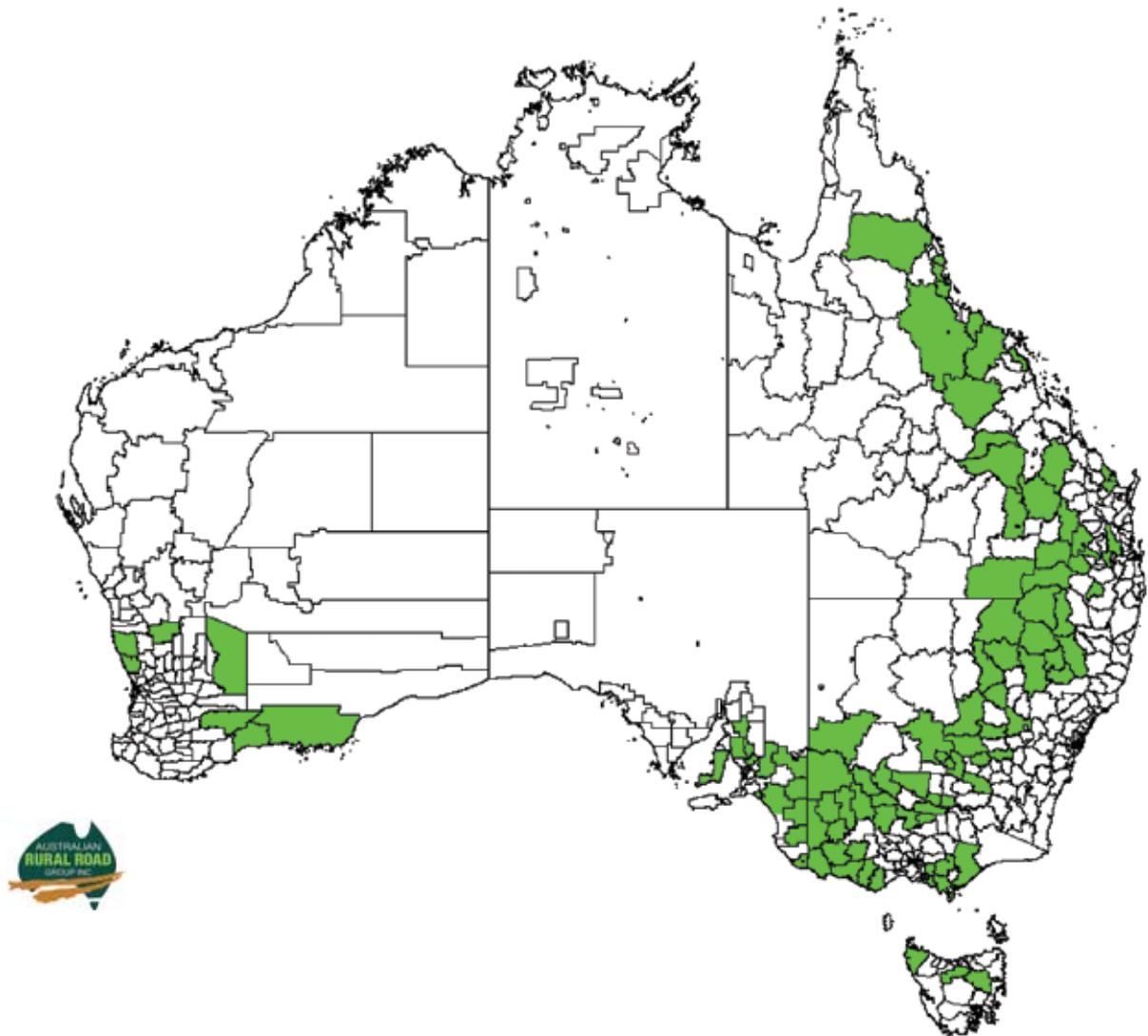
- 48% (\$17.9 billion) of Australia's total agricultural output in 2006;
- 6.9% of Australia's population in 2006 (1.37 million people);
- 11% of total Australian State/Territory land mass (908,000 square kilometres);
- 24% of all roads in Australia, by length (194,413 kilometres);

In the past, the rural road infrastructure debate has suffered from the perception that rural road investment is a subsidised activity –that it is merely a question of

urban communities subsidising underproductive rural areas by funding the community service obligation aspects of rural local roads. This is not accurate. Together, ARRГ members produce nearly half of Australia's total agricultural product. But despite this wealth production, rural local roads face significant funding pressures that require urgent asset management and funding reform.

Many are frustrated that there are not mechanisms available for planning and funding productive *future* road investments *in partnership* with road users and major rural industries. At times rural local governments need to create new or upgraded road networks for the future, not merely maintain those of the past. The ARRГ seeks reform of these matters on behalf of all rural communities whose industries could be made *more productive* and whose communities could be made *safer* by an improved approach to rural local road investment.





Map of ARR nominal membership

This map shades the local government areas in green which make up ARR nominal membership. Each of these rural local government areas produced over \$100 million in agricultural product. All rely heavily on the state of their local roads for their ongoing prosperity.

The remaining rural local governments not shaded on the map face similar pressures; some of them might well be producing similar amounts of agricultural product, if not for the barrier to efficiency that their local road networks represent.

NOMINAL MEMBERSHIP, VALUE OF AGRICULTURAL PRODUCTION*

Table 1. ARRГ local government members and agricultural production levels for 2006

STATE	REGION	SLA	PRODUCTION (\$M)
New South Wales	Northern	Moree Plains	532.5
Western Australia	South Eastern	Esperance	370.8
Victoria	Goulburn	Moirra - West	359.6
New South Wales	Murrumbidgee	Griffith	343.3
Queensland	Northern	Burdekin	313.7
Victoria	Western District	Corangamite - South	301.5
Victoria	Mallee	Mildura - Pt B	291.1
Queensland	Darling Downs	Waggamba	271.5
Queensland	Mackay	Bowen	270.0
New South Wales	Northern	Narrabri	260.5
Queensland	Far North	Cardwell	258.2
Victoria	Goulburn	Gr. Shepparton - Pt B West	252.1
Victoria	Western District	Moyne - South	238.8
Victoria	Mallee	Gannawarra	226.3
Queensland	South West	Balonne	221.0
Victoria	Mallee	Swan Hill Bal	221.0
South Australia	Murray Lands	Loxton Waikerie - East	218.2
Queensland	Darling Downs	Wambo	211.8
Queensland	Far North	Johnstone	205.1

South Australia	South East	Tatiara	203.8
New South Wales	Murrumbidgee	Carrathool	203.7
Victoria	Goulburn	Campaspe - Rochester	200.8
Victoria	Wimmera	West Wimmera	198.4
New South Wales	North Western	Walgett	196.2
Western Australia	Upper Great Southern	Lake Grace	192.8
Queensland	Fitzroy	Banana	191.8
Queensland	Wide Bay-Burnett	Burnett - Pt B	189.6
Victoria	Goulburn	Campaspe - Kyabram	184.9
Victoria	Mallee	Mildura - Pt A	179.5
Victoria	Wimmera	Horsham Bal	178.8
Victoria	Western District	Corangamite - North	177.7
Victoria	Gippsland	Baw Baw - Pt B West	171.6
New South Wales	Central West	Lachlan	171.6
Queensland	Darling Downs	Millmerran	171.4
New South Wales	Murray	Wakool	169.6
Victoria	Barwon	Colac-Otway - North	164.9
Queensland	Fitzroy	Bahinia	164.4
Victoria	Gippsland	South Gippsland - Central	163.0
South Australia	Murray Lands	The Coorong	162.3
New South Wales	Murray	Corowa Shire	159.3
Queensland	Darling Downs	Jondaryan - Pt B	159.1
New South Wales	Northern	Liverpool Plains	156.6
South Australia	South East	Naracoorte and Lucindale	156.1
South Australia	Yorke and Lower North	Wakefield	152.9
Victoria	Western District	S. Grampians Bal	151.9
South Australia	Yorke and Lower North	Yorke Peninsula - North	151.7
Queensland	Fitzroy	Emerald	150.6
South Australia	Murray Lands	Loxton Waikerie - West	147.9
Queensland	Darling Downs	Taroom	147.4
Queensland	Northern	Hinchinbrook	145.0
Queensland	South West	Bungil	144.6
Queensland	Far North	Mareeba	140.2
New South Wales	Northern	Gwydir	139.7
Victoria	Central Highlands	Ararat	139.6
Tasmania	Mersey-Lyell	Circular Head	139.4
New South Wales	South Eastern	Young	138.8

New South Wales	Murray	Conargo	138.1
Queensland	Darling Downs	Tara	137.6
Victoria	Western District	Moyne - North-West	137.4
Victoria	Goulburn	Gr. Shepparton - Pt B East	137.0
New South Wales	Murray	Berrigan	137.0
New South Wales	Central West	Bland	136.8
New South Wales	Murray	Wentworth	136.0
Western Australia	Midlands	Dalwallinu	135.9
Victoria	Mallee	Buloke - North	135.7
New South Wales	North Western	Narromine	135.5
South Australia	Murray Lands	Southern Mallee	135.4
South Australia	Murray Lands	Mid Murray	135.0
New South Wales	Central West	Cabonne	133.8
New South Wales	Northern	Tamworth Regional - Pt B	133.6
New South Wales	Murrumbidgee	Leeton	133.4
Queensland	Wide Bay-Burnett	Isis	132.3
South Australia	South East	Grant	131.8
Victoria	Loddon	Loddon - North	131.3
Queensland	Darling Downs	Chinchilla	131.1
South Australia	Outer Adelaide	Light	130.7
Victoria	Wimmera	Yarriambiack - South	128.3
Queensland	West Moreton	Gatton	127.9
Queensland	Northern	Dalrymple	127.3
Victoria	Wimmera	Hindmarsh	127.3
New South Wales	Northern	Gunnedah	125.5
Victoria	Mallee	Swan Hill - Robinvale	121.1
Queensland	Darling Downs	Stanthorpe	119.5
Victoria	East Gippsland	Wellington - Rosedale	118.0
New South Wales	Murrumbidgee	Wagga Wagga - Pt B	116.6
South Australia	Yorke and Lower North	Clare and Gilbert Valleys	116.6
Western Australia	Midlands	Gingin	114.6
New South Wales	Central West	Forbes	114.0
Western Australia	Midlands	Dandaragan	113.1
Victoria	Western District	Moyne - North-East	112.4
New South Wales	North Western	Warren	112.4
Victoria	Melbourne	Cardinia - South	109.5
Victoria	Mallee	Buloke - South	109.2



Tasmania	Northern	Northern Midlands - Pt B	108.7
Queensland	West Moreton	Esk	108.1
New South Wales	North Western	Coonamble	108.0
New South Wales	Murrumbidgee	Narrandera	107.4
Western Australia	South Eastern	Ravensthorpe	106.9
New South Wales	Murrumbidgee	Temora	105.6
Queensland	Mackay	Belyando	105.6
Victoria	Gippsland	South Gippsland - East	105.1
Western Australia	Midlands	Yilgarn	105.0
South Australia	Northern	Northern Areas	103.7
New South Wales	North Western	Warrumbungle Shire	103.2
Queensland	Mackay	Mackay - Pt B	102.9
Victoria	East Gippsland	Wellington - Maffra	102.3
Tasmania	Northern	Meander Valley - Pt B	101.8
Victoria	Western District	Glenelg - Heywood	100.6
Victoria	Gippsland	Bass Coast	100.5
TOTAL			17,908.9

Notes

1. All figures reported from the 2006 Australian census and ABS statistics.
2. Some names in this list have been represented as portions of larger local government areas (eg 'Northern Midlands, Part B'); this is due to earlier council amalgamations not matching entirely with the 2006 census reporting divisions.
3. In 2008 Queensland's local councils were restructured and many amalgamations occurred. Therefore the nominal Queensland membership that appears in the above list will not strictly correspond to the 2010 local government boundaries. This is expected to be resolved when the next iteration of ARRG membership is developed following the next Australian census returns.

THE ARRГ STRATEGY

THE ARRГ WILL SECURE ITS OBJECTIVES FOR RURAL LOCAL ROAD INVESTMENT BY:

1. Establishing the facts

The ARRГ will achieve its outcomes by contributing accurate analysis in this field that will better explain the productivity and safety challenges that declining rural road infrastructure represents to Australia.

2. Securing greater funds *and* better asset management and governance structures

The ARRГ recognises that more money alone, although vital, will not resolve the problem efficiently. A much-needed overall increase in funding must be accompanied by a commitment to an improved quality of national rural road infrastructure management and governance by local government and a commitment to encourage and fund productivity-enhancing investments by higher levels of government.

3. Promoting productivity and safety reforms, not playing politics

The ARRГ is committed to nonpartisan outcomes, recognising that governments of all persuasions have failed rural road infrastructure over many years and the benefits of reform in terms of greater safety and cost-effective agricultural productivity flow to all Australians, whether rural-or city based.



WHAT IS MEANT BY 'RURAL LOCAL ROADS?'

Some rural local roads are regional or arterial highways. Others are bitumen-sealed country roads. The majority are *unsealed* roads – only 41% of Australia's total road network is sealed in bitumen or concrete¹ – the percentage of local rural sealed roads is often much lower still. Some of these unsealed roads are not even sheeted regularly; effectively they are pathways cut into in the soil, at the mercy of the elements. Whatever their condition, taken together, these roads are the vital 'first and last mile' logistics link that enable the movement of Australia's total agricultural product, along with (and increasingly) many other major products, from the mining sector in particular.

These roads are also relied upon by rural



communities for their day-to-day amenity and social connectedness.

For these reasons, the road freight productivity and relative road safety of rural communities - and the downstream benefits of these outcomes for Australia as a whole - are at the heart of ARRГ objectives. Investing efficiently and strategically in this class of infrastructure is vital for the future of rural Australia.

RURAL LOCAL ROAD FUNDING AND AGRICULTURAL OUTPUT

Current road funding and management arrangements would suggest that higher levels of government have lost sight of the productive potential of many rural communities – productivity which is heavily reliant on local road infrastructure. As the agricultural output of ARRГ member areas clearly bears out, many rural local government communities are highly productive. But the ability of rural local government to *internalise* some of this production value as taxes or charges for reinvestment in local road infrastructure has always been very limited.

Productive rural roads, meagre local road grants?

In the 7 years from 2001 to 2008, Australian agriculture produced a remarkable \$253.5 billion dollars in gross value agricultural commodities². Almost all of these agricultural *outputs* began their journeys to domestic and export markets on Australia's rural local roads. Furthermore, the *inputs* that created these same products – fertilisers, seeds, machinery, breeding stock, farm labour, etc – employed

these same rural local roads. Yet over this same 7-year period, total Commonwealth local road grants under the *Local Government (Financial Assistance) Act 1995* (which includes local road grants for capital cities and other urban areas) totalled only around \$3.3 billion.

Even if all Commonwealth 'general purpose' grants - much of which are not rural, and which are never spent on roads in any event - were added to this total, only around \$11 billion in Commonwealth local government financial assistance grants reached all local governments across Australia in this period³. Adding net state government grants and Commonwealth government Specific Purpose Payments such as the *Roads to Recovery* program still does not add significantly to this total⁴.

Of course, this metric is overly simplistic. It does not take into account, for example, the local governments' own revenue that is invested in these roads. But the mere comparison should prompt questions about the extent to which current and potential rural productivity is acknowledged by Australia's current local road funding system.

1. Bureau of Infrastructure, Transport, Regional Development and Local Government (2009) *Australian Transport Statistics Yearbook 2009* p.32.

2. Figure collated from Australian Bureau of Statistics Cat no 7503.0 figures for gross value of national agricultural production from 2001-2007.

3. Both the local road and total local government grant figures were collated from Department of Transport and Regional Services (2008) 2007-08 Local Government National Report (*Report on Operation of Local Government (Financial Assistance) Act 1995*)- successive reports from 2001-02 to 2007-08 (ref. tables reporting allocations of general purpose and local road grants among jurisdictions in chapter 2 of each report).

4. State grants to local governments cannot presently be broken up by local road contributions, by state, but the 2007-08 Local Government National report Table 1.10 p.19 suggests that something less than perhaps \$700m in 2007-08 was spent by states on local roads. In addition, *Roads to Recovery* has contributed in the order of \$2.6 billion to local roads during this 7-year period.

HOW RURAL LOCAL ROADS INFLUENCE ROAD FREIGHT PRODUCTIVITY

Investing in roads is an investment in productivity. Targeted investment in road infrastructure can lower transport costs, which are a major input cost for rural enterprises often located great distances from their markets in cities and export ports.

A Productivity Commission Inquiry in 2006 heard that for every \$100 of ex-works meat and meat products produced, direct and indirect road transport services account for just under \$9 of cost⁵. The quality of roads can have a direct bearing on how efficient this freight task can be. More efficient roads can carry more efficient vehicles. Rural roads upgraded to carry B-double trucks rather than only traditional semi-trailers allow each truck to carry around 50% more freight on one vehicle – lowering farm freight costs significantly.

Efficient investments in economic infrastructure like roads *‘act just like technological progress...lower input costs mean lower total costs, which mean larger markets and further cost reductions’*⁶.

Greater rural road freight efficiency relies on greater rural road infrastructure investment

A recent paper examining a slowing of Australia’s agricultural total factor productivity growth over the past decade argued that in future, one of the most important elements in improving agricultural productivity will be ‘making the best use of

technologies as they become available’⁷. Yet in the case of even the seemingly ubiquitous B-double truck-trailer, application of this technology dividend remains limited across rural Australia - due primarily to a lack of funding available to rural local governments that would otherwise allow for roads and bridges to be assessed - and where necessary upgraded - to allow the B-double access to support more of the rural freight task more efficiently.

This is just one example of the retarding effect that poor rural road infrastructure can have on rural productivity. More significant investments in road infrastructure can open rural roads to sustainable access by even more efficient modern vehicle combinations.

In 1994, analysis revealed that an additional \$12 billion invested in Australia’s road infrastructure over a decade would increase economic output by \$6.7 billion in each year, creating an additional 9,250 jobs and increasing the nation’s exports by \$3.6 billion⁸. More recently, the Productivity Commission found that a 5% increase in Australia’s road and rail productivity would add \$3.1 billion to gross domestic product⁹. This is an objective that public policy cannot afford to lose sight of:

*‘Economic prosperity, our way of life, and many pleasures of living beyond the bare essentials are supported by freight movement. Human survival, sustainability, and progress as most people understand these concepts require that freight transportation exist and work well’*¹⁰.



Road freight is a very significant input to food production costs and retail price



B-double trucks reduce the cost of freight – that is, they carry around 50% more freight than a traditional semi-trailer, but do not cost 50% more in freight charges – yet they are still restricted in access to many local rural roads. Without greater local road investments, B-doubles and other even more productive vehicles cannot unlock further cost-effective rural freight productivity.

5. Australian Livestock Transporters Association *Carrying A Competitive Economy Into Tomorrow: Getting Road Freight Pricing, Investment in Roads and Regulations Right for Australia's Future* (May 2006) submission to Productivity Commission Inquiry into Road and Rail Freight Infrastructure Pricing p.11.
 6. Remy Prud'homme *Infrastructure and Development* in Bourguignon, François & Boris Pleskovic, ed. 2005. *Lessons of Experience* (Proceedings of the 2004 Annual Bank conference on Development Economics). 2005. Washington: The World Bank and Oxford University Press, pp. 153-181.
 7. Katarina Nossal and Yu Sheng (2010) *Productivity Growth: Trends Drivers and Opportunities for broadacre and dairy industries* article in *Australian commodities journal*, Vol. 17 No. 1 March 2010 p. 229 'Opportunities for lifting productivity growth'.
 8. Swan Consultants, *Impact of Road Transport Diesel Taxes on the Australian Economy* March 1994 – the conclusions were drawn for analysis using the ORANI model of the Australian economy. Some context: these dividends were equal to 25% of the economy-wide microeconomic reform benefits that had been identified 5 years earlier by the Productivity Commission in its 1989-90 *Annual Report*.
 9. Productivity Commission Inquiry Report No. 41 2006 *Road and Rail Freight Infrastructure Pricing* Appendix G.25.
 10. Mineta Transport Institute (California) June 2003 *Trucks, Traffic and Timely Transport: A Regional Freight Logistics Profile* p.4.

CASE STUDY: HOW RURAL ROAD UNDERINVESTMENT MAKES RURAL BUSINESS NON-COMPETITIVE

In 2005-06 an economic case study was commissioned by the rural transport industry to investigate the effects of transporting livestock by road at *lighter gross weights* in New South Wales than occurred in other states of Australia. This weight restriction was enforced by the New South Wales Roads and Traffic Authority, which was concerned at the poor state of many of its rural road and bridge assets. In other words, insufficient rural road investment had forced the NSW road authorities to limit the weight of livestock transport vehicles, to preserve a degraded road asset from further damage.

Livestock transport movements to and from the largest sheep processing plant in New South Wales were measured and the effects of the average 10% truck weight reduction were calculated as an effect on that processing plant's export prices.

It was concluded that the 10% weight reduction, which represented around 5% of the ex-works cost of the meat company's products, increased non-price barriers to that company by 1%. In price elasticity terms, the Econtech model of the Australian economy suggested that this weight reduction would cost the company 12% in meat exports (that is, the price elasticity of demand for sheep meat products is -12).

Put simply, a 10% reduction in truck weights for the company freight tasks on roads to and from the plant equalled a non-price barrier of 1%, causing FOB prices for the meat products to fall by almost 12%.



Rural road condition has a very direct impact on Australian food prices and market competitiveness: an efficiency-sapping road regulation in NSW caused by insufficient investment in rural roads was found to undermine the global competitiveness of meat products from rural NSW by 12% in export sales terms.

Two sides to the story – productivity can't be enhanced without funds

The reaction of the NSW road authorities in enforcing the weight restriction in the case study above might be undesirable from a freight productivity perspective, but it is also understandable: under current road funding arrangements, neither the state government nor rural local governments can capture the increased economic activity flowing from the higher weights so as to return a larger investment to these roads: road user charges are not sent to dedicated road funds and the Federal government (which receives two-thirds of total heavy vehicle road charges in fuel excise) has absolutely no visibility of the asset condition of Australia's rural local roads from which to target better network investments.

The NSW dilemma is therefore a common one across rural Australia – increasing heavy vehicle access to improve the productivity of local rural industries can sometimes consume these local roads much more quickly – and under current arrangements there are no means for these local governments to source extra funds to pay for new roads.

11. The ARRG is grateful to the Australian Livestock Transporters Association for permission to quote this case study, which formed part of the association's submission to the 2006 Productivity Commission Inquiry into Road and Rail Freight Pricing – see also note 5.

HOW RURAL LOCAL ROAD CONDITIONS INFLUENCE RURAL ROAD SAFETY

The safety of rural communities depends on road infrastructure that promotes safer driving and better accident survivability. Under-funding of rural roads severely limits the ability of local government to achieve these outcomes.

Monash University Accident Research Centre analysis confirms that *'the nature of rural roads, more so than for their urban counterparts, plays a major role, not only in terms of the risk of crashing but more importantly in terms of the severity of injuries sustained'*¹².

The presence of roadside hazards like large trees, unsealed road edges, rutting, line of sight problems, lack of guard fencing on curves and even the engineering of the curves themselves are daily hazards for rural communities. When combined with the long distances travelled and the high average travel speeds in country areas, these features become major contributing factors to rural road accidents, with tragic results for rural communities.

Better investments *will* save lives on rural local roads

World-leading Australian accident research confirms that smart investment in rural road infrastructure can diminish rural road safety risks significantly:

- **Treatments for roadside hazards in rural settings have been found to reduce pole and other fixed roadside casualty crashes by 68%**¹³.
- **Clearer road markings (which 'channel'**



vehicles safely at rural intersections) reduce casualty crash frequency by 36%¹⁴.

- **Crash rates can be reduced by 20% for every one metre increase in bitumen seal width ('shoulder sealing') of an existing road**¹⁵.
- **Roundabouts at rural intersections can reduce casualty crash risks at intersections by 70-80%; when such crashes occur, the roundabout reduces the cost of accident by around 90%**¹⁶.

Such improvements help to deliver the sort of safety levels that can sometimes be taken for granted in more urbanised areas. Yet greater funding is required to make such improvements to rural roads – and as this paper will show, many rural councils are already unable to fund even *basic* maintenance of their local roads, let alone invest in additional life-saving infrastructure improvements. Improving the safety outcomes of rural local road infrastructure is therefore, along with productivity, the key goal for the ARRg.

IMPORTANCE OF ROADS IN THE RURAL LOCAL GOVERNMENT CONTEXT

Road asset management is a far more confronting issue for rural than for urban local governments. Nationwide, rural local government road assets that deliver basic productivity and social amenity are deteriorating; the local governments charged with responsibility for these assets cannot afford to maintain them effectively, let alone begin to replace them with a safer modern equivalent. As one examination of the problem put it:

'For rural councils, asset management is road management'.

That same study revealed that roads are 82% of a rural local government's total average annual asset consumption – whereas roads and bridges made up only 66% of a metropolitan local government's asset consumption total¹⁷.

Frustratingly, clear and collated data on the size and shape of this nationally-significant infrastructure crisis, local government area by local government area, *does not exist*. This makes it hard to explain the problem to the wider community and influence positive reform.

12. Monash University Accident Research Centre (2004) *Cost Effective Infrastructure Measures on Rural Roads Report No.217*.

13. Tziotis, M (1993) Evaluation of mid-block accident 'Black Spot' treatments. Report No 48 Melbourne, Australia: Monash University Accident Research Centre.

14. Newstead, S. and Corben, B. (2001) Evaluation of the 1992-1996 Transport Accident Commission-funded accident black spot treatment program in Victoria (Report No 182). Melbourne, Australia: Monash University Accident Research Centre.

15. McLean, J. (1996) *Review of accidents and rural cross section elements including roadsides*. (Report No ARR 297) Melbourne, Australia: ARRB Transport Research

16. Newstead, S. and Corben, B. (2001) *see note 12 above*.

17. Local Government Infrastructure Management Group (2001) *A Wealth of Opportunities: A Report on the Potential from Infrastructure Asset Management in South Australian Local Government* p. 16; p.21.

CASE STUDY: RESEALING ROADS SAVES LIVES, BUT CAN'T BE DONE WHERE FUNDS ARE LIMITED

New research is gaining a clearer understanding of the effects of road texture and condition on Australian rural road crashes. In 2008, the Austroads Strategic Research Program¹⁸ established that resurfacing high speed bitumen roads where the macrotexture of the road is very thin would bring 'substantial benefits' in terms of crash reductions. But the survey also estimated such reseals would cost in the order of \$A28-42,000 per kilometre.

In 2006, a review heard how councils are forced to manage the local road funding gap: the Great Lakes



Shire Council informed the review that in its nominal roads maintenance program, sealed bitumen roads in the shire would be resurfaced once every 7-10 years, but the ongoing lack of funds meant that council had pushed out resealing of its bitumen roads to once every 23 years – hastening road failure and increasing the inherent crash risk¹⁹. These findings only reinforce the impossible management position faced by rural local councils, insufficiently funded, yet responsible for a decaying inherited road network.

18. P. Cairney and P. Bennett, ARRB Group (2008) Relationship between road surface characteristics and crashes on Victorian rural roads <http://www.arrb.com.au/admin/file/content13/c6/6-relationship%20between%20road%20surface%20characteristics%20and%20crashes%20on%20Victorian%20rural%20roads.pdf>.

19. Independent Inquiry into the Financial Sustainability of NSW Local Government ('The Allan Inquiry') (2006) *Are Councils Sustainable?* submission by Great Lakes Shire Council p.2.

THE NATIONAL LOCAL ROAD FUNDING GAP: HOW BIG IS THE PROBLEM?

In 2006 the Federal Department of Transport and Regional Services reported that the total local road renewal shortfall for NSW local governments was \$121 million *per annum*. This Federal report then drew on state level data from some (not all) other jurisdictions and extrapolated these results across the total nationwide local government road length. The result suggested the national local road funding shortfall was **\$404 million per annum**²⁰.

In the same year, PricewaterhouseCoopers research commissioned by the Australian Local Government Association (using Access Economics and Municipal Association of Victoria data) suggested an annual funding gap (ie to reduce to the total infrastructure backlog and annual underspend, including roads) of between **\$1.8 and \$2.3 billion per annum**²¹. The Federal Government noted this estimate in its 2007-08 Local Government National Report²².

Also in 2006, the Institute of Public Works Engineering Australia carried out an assessment of all local roads in NSW. It received detailed survey reporting of local road asset condition, valuation and funding from 135 of 152 NSW local governments. This revealed a NSW local road funding shortfall of \$627 million *per annum*.

If extrapolated on exactly the same basis as the Federal department's own estimate, it would suggest a national shortfall of **\$2.823 billion per annum** – a figure \$2.419 billion (or almost 7 times) more than the Federal Government's estimate of the size of the problem²³.

How can three informed estimates of the same problem be so different?

While debate may still surround what is the most credible estimate of the 'true' local road asset funding gap, it is important to note that the IPWEA assessment was based not on 'industry standards', but on practical, civil engineering 'assessments of actual road asset performance and field operating performance of these assets'. In any event, the fact that no agreed figure exists – and that the Federal government estimate can be almost 7 times smaller than that derived by local government road engineers and financial managers themselves – suggests that the first major obstacle to local road reform is a highly-damaging gap in national research, reporting and oversight of the local road infrastructure management and its funding pressures.

20. Department of Transport and Regional Services - Local Government Report 2004-05 (*Report on the Operation of the Local Government (Financial Assistance) Act 1995*) p.80 table 4.2.

21. Access Economics and Municipal Association of Victoria research as summarised in Price Waterhouse Coopers report (2006) *National Financial Sustainability Study of Local Government* – report prepared for the Australian Local Government Association Table E.2 p. 11.

22. Department of Infrastructure, Transport, Regional Development and Local Government - Local Government Report 2007-08 (*Report on the Operation of the Local Government (Financial Assistance) Act 1995*) p.51.

23. Extrapolation of IPWEA NSW Road Asset Benchmarking Report (2008) p.9 table 11: 89% of council surveys were judged valid for analysis. 89% of total local road length in NSW amounts to 128,398km. The reported \$627 million road funding gap represents \$4,883.25 per km when multiplied by this figure. \$4,883.25 was multiplied by 89% of local road length nationwide (578,249km) to project a national renewal shortfall of \$2.823 billion *per annum*. While it is certain that this extrapolation will fail to capture many state peculiarities, the NSW figures were based on sound and detailed road asset survey questions completed by council engineers and financial managers. NSW local roads are just over 22% of the national local road total, measured by length.



THE RURAL LOCAL ROAD CRISIS AND INTERGENERATIONAL EQUITY

The local road funding crisis not only represents lost productivity and lessened road safety – it also represents a debt that future Australian generations will be forced to pay. In its 2006 assessment of the matter in New South Wales, Access Economics noted that:

‘Too little consideration is given to the extent to which future generations are expected to pick up the tab for renewing council provided infrastructure’.

The ARRG is concerned at the intergenerational equity issue that underfunding and ‘under-management’ of roads represents. At present, debt levels of rural local governments are very low. In this strict sense, the road asset problem *is not* being deferred through credit for



Is it fair to leave multi-billion dollar local road infrastructure dilemmas for future generations to solve?

future generations to pay later. But in the wider sense, future generations *will* pay anyway, because current local road asset renewals are falling well short of consumption rates.

The ARRG believes a far more comprehensive national effort is required to address the causes of this crisis ‘head on’, to avoid burdening future generations of Australians with an even greater road crisis.

EFFECTS OF THE RURAL LOCAL ROAD FUNDING GAP

The decline in rural local road asset condition is typically represented by a *funding gap*. In simple terms, this funding gap represents a financial debt incurred for local roads.

But this financial debt is itself just a way of representing the fact that road users cannot do things quite as productively, or with as much certainty, or quite as safely as they would like, now or in the future: the funding gap has *real impacts* on rural communities.

The ARRG believes that the rural local road funding gap has become a far too academic debate: it has become the preserve of only local government budgeting departments and some transport analysts. Unfortunately, the wider Australian policy debate about road infrastructure appears to have lost an understanding of what happens when the funding gap means that rural local roads cannot function as they should.



Implications of the funding gap

Funding gaps create *real* negative impacts for rural productivity and safety. As roads deteriorate, engineering personnel in responsible local governments typically have several questions to put to the local government executive in the interest of preserving the road asset and ensuring acceptable road safety for as long as possible:

Asset protection and extension questions:

- Should heavy vehicle access be allowed only at reduced weights or frequency?
- In extreme cases, should heavy vehicle access to the road be revoked altogether?
- Should bitumen roads be allowed to deteriorate



In accounting terms, this soil road is part of a 'national local road funding gap'. But to local farming communities, this road can threaten their livelihoods, because it can't be used when wet.

back to unsealed condition?

- Should safety-enhancing features for the road be postponed to free-up funds for overdue routine road maintenance?
- Should some bitumen roads have their resealing schedules made less frequent?
- Should some unsealed but gravel-sheeted roads be allowed to deteriorate back to their underlying ground soil conditions?

All of these decisions have negative implications:

- for road safety;
- for local economic revenue, lost through declining tourism;
- for road access, especially in wet weather conditions;
- for existing speed limits and therefore for the efficiency of the freight task; and
- for road freight prices to rural customers and to consumers of agricultural products.

The 'first mile' is the first casualty of budget pressures

Research suggests that it is unsealed local roads – the 'first mile' of much of Australia's agriculture task – that are usually the first victim of local government road budget pressures: the 2008 Institute of Public Works Engineering Australia *Road Asset Benchmarking Project* revealed that local unsealed road re-sheeting life cycle costs in NSW were \$132 million *per annum*, yet only \$29 million of this amount was *actually allocated* to resealing these roads due to wider pressures²⁴.

24. Institute of Public Works Engineering Australia (2009) *Road Asset Benchmarking Report 2008* Table 12 p. 9.

PART 2 GOING NOWHERE

GOING NOWHERE: 10 DRIVERS OF THE RURAL LOCAL ROAD CRISIS

In 2006, a review of NSW local government sustainability could have been speaking for local governments across the nation:

'NSW local government finds itself responsible for a legacy of major infrastructure that is expected to reach the end of its usable life in the next few decades. It has been argued that the current revenue mechanisms available to local government were not designed to meet the financial burden of second generation infrastructure renewal'²⁵.

This 'second generation' infrastructure challenge has at least 10 major causes:

- 1 Long investment cycles have 'promoted' underinvestment**
- 2 Expectations of local government services have grown**
- 3 Local government road asset management planning is haphazard**
- 4 Treatment of road asset valuation and depreciation is confused**
- 5 Costs have been shifted from higher to local government**
- 6 Revenue generation capacity more limited for rural local government**
- 7 The road charging model does not link charges to investment**
- 8 Hard to attract private investment in local road infrastructure**
- 9 No national reporting obligations for local road infrastructure**
- 10 Grant funding methodology does not address road productivity**

25. Independent Inquiry into the Financial Sustainability of NSW Local Government ('The Allan Inquiry') (2006) *Are Councils Sustainable?* p.115.

1. LONG INVESTMENT CYCLES HAVE 'PROMOTED' UNDERINVESTMENT

Road infrastructure has a deceptively long investment cycle: over the course of many years, roads can tend to become almost 'invisible' to financial planners, who can be tempted to assume that the roads will be there 'forever' and that maintenance can be deferred with little impact. Successive governments have been lulled into relative inaction thanks to the more substantial investments of earlier days: in the mid-1960s, Australia – (public and private investment) - spent around 6% of GDP on investment in roads, rail and utilities. By 2000, this had slipped to just over 4%. Although private investment grew in relative terms, it was not enough to cover the decline in public funding: in 2000, Australia's governments invested little more than 2% in economic infrastructure²⁶.

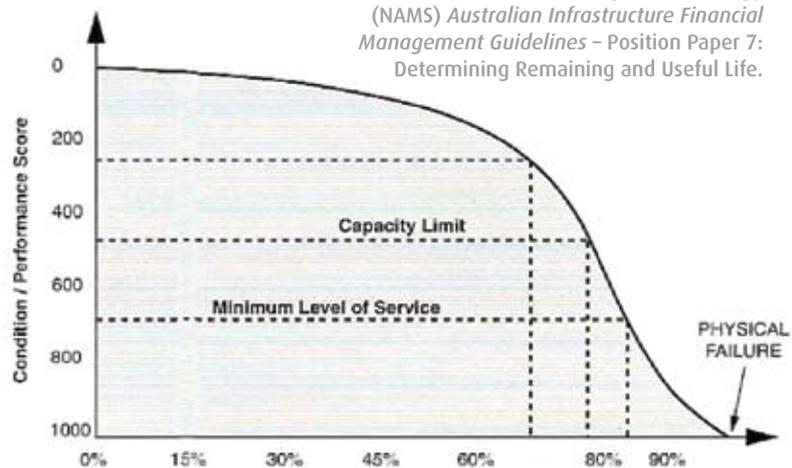
Ongoing maintenance is a major cost:

*'The initial construction of infrastructure accounts for only about 20% of its lifetime costs. The remaining 80% of costs arise from operating, maintaining and renewing the infrastructure and ultimately disposing of it once it is superseded'*²⁷.

Much of today's rural road networks were first built in the 1950s and have not received sufficient maintenance or renewal since this time. Accordingly, there are now not enough funds to meet the life cycle costs of these road assets. At this late stage in the life of this infrastructure, as the 'decay' curve below suggests, maintaining even basic safe levels becomes almost exponentially more costly, as time progresses:

Graph1 (above right) shows how important regular maintenance is in extending the life and capacity of a road asset. Early neglect hastens the ultimate failure of the asset; once a road has passed beyond a certain condition in its effective life, it will decay rapidly, and

Graph 1 - Typical 'decay curve' of a road asset
 Source: National Asset Management Strategy (NAMS) Australian Infrastructure Financial Management Guidelines – Position Paper 7: Determining Remaining and Useful Life.



'last minute' funding to improve the situation will be proportionally much more expensive and by degrees, less and less effective.

Timely intervention pays dividends

The ARRГ is anxious to draw attention to local rural roads as an asset class of national importance *now*, at an already advanced stage of much of the asset's consumption, but before it reaches the decay point where exponentially greater funding injections are required by higher governments for little gain.



Without regular sealing and maintenance, local roads can become so waterlogged that they collapse altogether - stranding whole communities (Photo: Northern Territory Police)

26. All figures quoted can be found in Australian Bureau of Statistics *Australian System of National Accounts 2006-07 'Investment in Australia by Industry and Sector'*.

27. Department of Infrastructure, Transport, Regional Development and Local Government (2008) 2007-08 Local Government National Report (*Report on Operation of Local Government (Financial Assistance) Act 1995*). P. 50.

2. EXPECTATIONS OF LOCAL GOVERNMENT SERVICES HAVE GROWN

In recent decades, the expectations placed on rural local governments have expanded greatly, stretching funds across more services. The 'traditional' roles of councils in 'roads, rates and rubbish' have expanded beyond recognition. In its 2001 *Review of the Local Government (Financial Assistance) Act 1995*²⁸, the Commonwealth Grants Commission found new trends emerging in local government expenditure pressures – and their effects on road spending:

- Adding a range of social services to the traditional planning and building approvals, road maintenance and waste services;
- Increase in the relative importance of recreation and culture and housing and community amenities;
- Expansion of education, health, welfare and public safety services, and
- A gradual decline in the relative proportion of road expenditure as spending on other services has seen faster growth rates.

In 2006, an independent review of New South Wales local government found that *'although road*

expenditure remains the largest function, the Commission found its importance has declined from about half of total expenditure in the 1960s to a little more than a quarter in the 1990s'.

These new funding pressures can be particularly acute in rural areas, where access to state and federal government services can often be difficult to achieve.

In the same 2006 inquiry, a survey was conducted of resident preferences for different types of local government expenditure. In most cases, spending on roads topped the list of preferences, while respondents indicated that they would be prepared to see less spending on culture and education and enforcement of by laws. But the review noted that:

*'These overall conclusions must be qualified by taking note of the special case exemplified by 'rural/remote' councils. The (local resident spending preferences survey) report indicated that residents in these councils 'were reluctant to nominate areas for possible expenditure cuts'*²⁹.

28. Commonwealth Grants Commission (2001) *Review of the Operation of Local Government (Financial Assistance) Act 1995* p. 53.

29. Independent Inquiry into the Financial Sustainability of NSW Local Government ('The Allan Inquiry') (2006) *Are Councils Sustainable?* p.171 review of the IRIS report (2005) on public perceptions of future service needs of local governments. The quote is drawn from p. 50 of the IRIS report.

CASE STUDY: SNAPSHOT OF RURAL LOCAL COUNCIL BUDGET RESPONSIBILITIES - THEN AND NOW

In 1983, over 50% of Moree Plains Shire Council's budget was roads. In 2010 it was less than 20%, due to wider cost pressure growth. Grants from higher government had reduced too.



In the past 30 years many new types of costs have grown to confront rural local councils – they compete directly with road maintenance and renewal for budget attention (Photo: Nicole Steinke, ABC rural).

Table 2: Moree Plains Shire Council budget comparison 1983-2010 (\$)

	1983	2010
Total roads spend budget	5,387,470	13,136,018
Total council budget	10,679,300	68,157,043
Road spend as %	50.45%	19.27%
Higher government grants and subsidies	3,181,517	10,713,000
Total council income	9,678,829	47,102,000
Higher gov't grant and subsidies as % of total budget	32.87%	22.74%

Many rural councils face this dilemma: own-source revenue is stretched, grants from higher government are no larger (or have decreased), yet far more services are considered 'baseline requirements' for funding. Naturally it is tempting to reduce road maintenance 'at the margins' - the impacts of such cuts may not

be obvious in the coming budget cycle - but this does great long-term damage to the road asset. Solving this problem involves granting road asset management greater importance *as well* as providing a net increase in funding.

3.

LOCAL GOVERNMENT ROAD ASSET MANAGEMENT IS HAPHAZARD

From one rural local government to the next, approaches to road asset management assessment, planning and financing will differ. While there are several professional systems available for developing such plans, it is certain that adopting some form of professional infrastructure asset management plan linked to an over-arching council financial plan is the best way for local government to better understand and manage road infrastructure.

A number of previous inquiries into local government roads have pointed to the fact that some councils will prefer to make spending decisions on human services and social infrastructure rather than invest in road maintenance at levels closer to the recommendations of their civil engineers. The Hawker review was critical of this tendency, arguing that councils need to 'say no' more often to poor funding requests³⁰. Yet without long-term asset management assessments in place, it can be too hard to build compelling arguments to defeat poor but often popular short-term funding decisions: without detailed road plans linked to a

council's long-term financial plans, it is hard for local governments to represent to their communities the negative effects on safety and productivity of 'alternative' spending choices, made at the expense of local road asset investment. The Federal Department itself has summed up this problem:

'Communities expect local government to provide a range of services while often not having sufficient information on the long-term costs of delivering those services'³¹.

Good asset management plans that are linked to local government financial plans give local government the opportunity to make a more compelling case to their community for responsible investment in local roads – equally, they give the community the ability to oppose frivolous spending proposals with more compelling road asset data and modelling. While the situation is improving nationwide, the lack of long-term planning and management of road assets continues to contribute to the size of the rural road asset funding gap seen today.

30. House of Representatives Standing Committee on Economics, Finance and Public Administration ('The Hawker Review') (2003) *Rates and Taxes – A Fair Share for Responsible Local Government* p.61.

31. Department of Infrastructure, Transport and Regional Services (2008) Submission to the Productivity Commission Research Report *Assessing Local Government Revenue Raising Capacity* p.1.

CASE STUDY: GOOD ASSET MANAGEMENT PRINCIPLES ARE NOT APPLIED TO ROADS NATIONALLY

Holding *efficient* assets now and in the future requires *efficient* planning and investment

Imagine a large nationwide trucking company: certainly a big part of its success will lie in the skills, enthusiasm and quality of its people: the truck drivers, mechanics, sales team and executives. But in *physical* terms, a large trucking company is made up of prime movers, trailers and depots – all physical assets. These assets will be ‘consumed’ over time, as the trucking company goes about its business. In time, all trucks will reach the end of their life and depots will require renovation or relocation.

One of the most important tasks for the trucking company will be to manage these physical assets efficiently. This will involve:

- Establishing *regular* and *accurate* valuations of company trucks, trailers and depots and their individual and combined value(s) at any one time;
- Ensuring asset maintenance cycles and new purchases are planned for and budgeted;
- Ensuring that maintenance plans are translated into *accurate* corporate depreciation schedules to allow for the timely replacement of trucks, trailers and depots at the most efficient time, to avoid being left with old and run-down assets (which will begin to cost the company more in breakdowns and maintenance than they will create in sales).

All of this is simple business practice for any company that wants to manage its physical assets in order for profits to be maximised.

Simple business logic does not apply to Australian local road management and funding

Like the trucking executives, it might be argued that Australia’s Governments are running a ‘company’ - this ‘company’ (amongst other things) funds roads for its



Managing many physical assets at once - such as for a large trucking fleet - involves adopting some simple but essential asset management principles. Yet these simple principles aren't applied consistently to Australia's local road asset management and financing.

customers (the Australian public). This in turn promotes business activity and supports Australia’s standard of living. Yet Australia in 2010 does not manage these physical assets *in any way* like the smart trucking company would:

- **Local road asset management planning is patchy** - While it is steadily improving, perhaps only half of Australia’s local government areas are producing robust long-term road asset management plans to international standards – at July 2010, 251 of 555 Local Government Areas were part of Australia’s leading asset management system NAMSPLUS³². Some other State-based systems add to this total, while most state governments are moving towards mandating such plans, if they have not already done so. Yet despite the fact that more and more councils are training personnel in effective road asset management assessment and planning, with the best intentions, the quality and capabilities of asset management planning across local government areas remains mixed;

- **Local road asset valuations are flawed** - The basis of local road valuations are in many cases flawed – many local government areas continue to value their road assets on original or historical cost basis, rather than on a more appropriate ‘fair value’ basis – thereby understating the value of the asset and ensuring not enough money will be set aside in depreciation to renew the asset (*see also a more detailed discussion of this pressure following*);

- **Local road asset depreciation schedules are flawed** - In many cases, depreciation schedules do not reflect the actual consumption rates of these road assets, meaning there is too little in funding being set aside for the maintenance and renewal - this reflects a disconnect between the professional engineering

32. Institute of Public Works Engineering Australia (2010) Report of the National Asset Management Committee July 2010 p. 1 Item 3 *Asset Management Plan Preparation Training*.

CASE STUDY: GOOD ASSET MANAGEMENT PRINCIPLES ARE NOT APPLIED TO ROADS NATIONALLY. CONTINUED

assessment of the decay rate of the road compared with the accounting treatment of depreciation for the road. The wider the disconnect, the less likely that renewal of the road asset will be catered for;

- **There are no national local road asset management reporting obligations** - Perhaps most alarmingly of all, there is no national local road asset management system in Australia. No single body collates information on the true value of these road assets, or reviews and analyses consumption and depreciation levels, or take steps where insufficient funds are identified to renew these assets.



Governments take note: if the company won't control its assets, the assets will control the company.

Not a nationally significant problem?

Historically, Federal Government has not sought local government asset management plans as a condition of grant funding – meaning it has no ability to analyse the local road problem and place priority funding into the most critical areas. In 2006 the Local Government and Planning Ministers Council agreed that work should begin to develop nationally consistent frameworks on local government asset and financial management frameworks³³. But this falls short of an ideal process: the trucking company discussed earlier would surely require more of its trucking fleet managers than adherence to 'guidelines' – it would probably require accurate asset

reports, updated valuations and accurate depreciation schedules for every asset. Australia is a long way from these professional standards when it comes to local road management.

Learning the lessons of industry can deliver better rural local road management policies

In the business world, any large asset-intensive company that was managed with the haphazard asset management and reporting taken by Australia to its local roads would quickly lose the ability to manage its assets: the company would not know when to make efficiently-timed repairs and maintenance or new vehicle purchases; it would increasingly be plagued by breakdowns, incomplete deliveries and dissatisfied customers; its fleet would be riddled with poor and unsafe vehicles and depots; most importantly, poor approaches to depreciation and valuation of its assets would ensure that the company was not setting aside enough funds to recover the situation. In the end, such a company would almost certainly go out of business in a competitive marketplace.

Australia is a sovereign nation, so increasingly poor road networks will not send it 'out of business'; but Australia *is* in a competitive global market for export products. In this sense Australia risks being left behind by its competitors if its local road assets are not managed more professionally, on a national basis.

In the ARRG's opinion, the current 'system' is hardly worthy of the title: without significant intervention to improve the current structural arrangements, the productivity of Australia's local roads will continue to deteriorate, funding gaps will widen, road safety outcomes on local roads will continue to worsen, rural freight prices will rise and gradually, these road networks will start to make many rural communities unviable.

33. <http://www.lgpmcouncil.gov.au/communique/20090508.aspx>

4. TREATMENT OF ROAD ASSET VALUATION AND DEPRECIATION IS CONFUSED

A lack of effective nationwide asset management planning, reporting and supervision has over the years given rise to the very damaging problem of inconsistent treatment of local road asset valuation and depreciation.

Mistaken approaches to valuation and depreciation mask the true funding gap

Asset depreciation values are determined by the valuation that was made for the road. The majority of local governments have undervalued their road assets by valuing them 'at cost' – that is, at original or historic values within current reporting regimes. It appears that only a minority of local governments are assessing their road assets on a 'fair value' basis³⁴. In NSW research has shown that only 13% of councils are valuing their road assets on a fair value basis. As a result, these local governments have been underfunding road asset depreciation in their operating accounts for many years.

The high cost of taking the classic accounting view of depreciation for road infrastructure

This problem is compounded by applying an accounting view of road depreciation, rather than an engineer's view of road decay, as demonstrated in the road decay graph earlier: straight line accounting depreciation of road infrastructure is unlikely to set aside sufficient funds at the right time to maintain the road.

The 2006 IPWEA audit of 89% of New South Wales local government areas found that the reported depreciation expense for 152 local government areas in NSW (ie around 20% of all local governments nationwide) was worth only 53% of the estimated

life cycle renewal cost (capital expenditure) required for these roads³⁵. Two other independent assessments have put the effects of this phenomenon on the road funding gap at between \$400m and \$600m *per annum* for NSW local government alone³⁶. Such analysis forces a thorough reassessment of the collective understanding of the true local road funding gap facing the nation.

How council amalgamation pressures can drive perverse depreciation outcomes

The ARRГ believes that the trend to amalgamate local government areas has probably exacerbated the confusion in local road valuation and depreciation figures.

Typically, amalgamation efforts will place local governments that cannot fund their asset depreciation payments on a 'watch list' for amalgamation. Anecdotally, councils have at times countered this threat simply by altering the life-cycle assumptions for their road assets, thereby making the depreciation figures look serviceable and reducing the threat of amalgamation. Thus, a road that would more realistically have a life span of 20 years might be reassessed as having a 100-year life span before replacement: this significantly reduces the depreciation pressure on the road and deflects attention from the net depreciation pressures of that local government.

Such paper manipulation of the problem does not make the road asset crisis in these councils go away. *But just as importantly, nor does amalgamation:* the local road funding crisis is not a matter to be solved by marginal efficiency gains and economy of scale strategies alone. *Practical national asset management and increased and more efficient funding are the only long term solution to this crisis.*

34. Independent Inquiry into the Financial Sustainability of NSW Local Government ('The Allan Inquiry') (2006) *Are Councils Sustainable? Independent Inquiry into the Financial Sustainability of NSW Local Government Final Report* p.128

35. Institute of Public Works Engineering Australia (2008) *Road Asset Benchmarking Project NSW* p.26

36. Institute of Public Works Engineering Australia (2008) *Road Asset Benchmarking Project NSW* p.26 *Comparison of 2007/08 depreciation with renewal cost and expenditure. The two independent reviews were conducted by Access Economics and Jeff Roorda and Associates as part of the Allan Review of NSW Local Government in 2006.*

CASE STUDY: LOCAL ROAD ASSET REVALUATION AND ITS EFFECTS

Road revaluation will force significant re-evaluation of the size of the funding gap

Conducting valuations of the road asset on a 'fair value' basis, using more reasonable assumptions about the future life span of the existing road, are tasks that face many local governments. This exercise is likely to increase the funding gap even from current levels, but this is a necessary step in getting to grips with the real size and shape of the problem.

The table below shows a recent road asset revaluation and depreciation exercise by one ARRG member. Many councils still value their road assets

predominantly on an historical cost basis and life-cycle assumptions are too generous. The valuation drives the depreciation schedule. This represents the amount of money that should be set aside to maintain/replace the road over time. If the initial valuation isn't accurate, local government won't be putting aside enough funds for the future. As seen below, this council's use of the more appropriate 'fair value' valuation of roads combined with a more realistic reassessment of the useful life of the current asset pushes up the annual depreciation amount by \$3.423 million. Thus, the problem is now bigger, but it is also more accurate and visible – it can start to be managed.

Table 3: A recent rural council road asset revaluation and its budgetary impacts

Asset Category	Valuation 30 June 2009 (Sum At Cost plus At Fair Value)	Valuation 30 June 2010 ¹ Fair Value (i.e. Current Replacement Cost)	Yearly Depreciation Expense 2009	Yearly Depreciation Expense 2010 ^{1,2}
Sealed Roads	\$117,204,000	\$131,911,193	\$1,518,000	\$4,777,318
Unsealed Roads	\$112,700,000	\$104,929,480	\$386,000	\$550,446
Totals	\$229,904,000	\$236,840,673	\$1,904,000	\$5,327,763
Change		\$6,936,673		\$3,423,763

1. Name of council withheld. At time of publication figures are draft, subject to independent audit.

1. Includes the addition of 233.7km of Regional Roads into the Asset Register.

2. Reflects true consumption of road assets.

5. COST HAVE BEEN SHIFTED FROM HIGHER TO LOCAL GOVERNMENT

Historically, state governments in particular have divested themselves of some functions of government, handing these responsibilities to local governments, most often without also providing ongoing funding streams to meet these tasks. In the case of regional highways, some states have handed over regional arterial highway networks to local governments, without necessarily providing the ongoing level of resources to meet the life-cycle funding requirements of these road assets.

The 2003 House of Representatives Standing Committee review of cost shifting commented that:

'cost shifting is, ultimately, a symptom of what has become dysfunctional governance and funding arrangements'.

The impact of cost shifts on local rural road infrastructure funding is difficult to quantify. But in NSW, the 2006 Allan Review of local government viability commissioned a survey to this end. It found that:

'the total burden of cost shifting may be costing NSW Local Government about \$430 million per annum. The survey of 19 councils found a cost shifting ratio of almost 7% of total ordinary revenue excluding capital revenue'³⁷.

In the end, it is local governments that are *always* the loser in cost shift events – as one submission to a review of local government viability states, when it comes to providing services, local government is always the 'last man standing'³⁸.

6. REVENUE GENERATION IS MORE LIMITED FOR RURAL LOCAL GOVERNMENT

The ARRG membership collectively produces almost \$18 billion in agricultural product. In that context, it is tempting to ask: *'if you are making so much money from your agricultural output, why do you need grants and why do you have an infrastructure problem?'*

Part of the unique difficulty faced by rural local governments is their more limited ability to generate significant own-source revenue.

In 2008, the Productivity Commission conducted research into local government revenue raising capacity. The Commission's report found that rural local government areas will generally have less opportunity to generate as much own-source revenue as capital city and other urban areas, where incomes are generally

higher, where council rates are correspondingly lower as a percentage of total income and where more revenue can be generated through charges such as parking and fines.

The report examined the ability to raise own source revenue across different council environments and found that urban councils had over 4 times the *fiscal capacity* of rural councils. Indeed, the report noted that:

'for many, but not all, urban councils, the increase in (own source) revenue raising effort would lead to them (councils) being financially independent, based on current levels of expenditure... for rural and remote councils, the situation is different'³⁹.

37. Independent Inquiry into the Financial Sustainability of NSW Local Government ('The Allan Inquiry') (2006) *Are Councils Sustainable? Independent Inquiry into the Financial Sustainability of NSW Local Government Final Report* quoting survey by Moegen 2006 p. 11.

38. Independent Inquiry into the Financial Sustainability of NSW Local Government ('The Allan Inquiry') (2006) *Are Councils Sustainable? Independent Inquiry into the Financial Sustainability of NSW Local Government Final Report*.

39. Productivity Commission Research Report (2008) *Assessing Local Government Revenue Raising Capacity* p.xxx.



CASE STUDY: FUNDING ROADS IS EVEN HARDER WHEN THERE ARE NO RATEPAYERS

Some rural councils must invest considerable funds in 'non-rateable' road networks

Road funding pressures are often exacerbated by the fact that rural councils are responsible for maintenance of road networks in 'non-rateable' areas, such as national parks.

The Colac-Otway Shire in south-west Victoria is responsible for 410 km of roads that either provide access to or abut Crown land, such as the Great Otway National Park and Otway Forest Park. This non-rateable road represents 25% of the Shire council's total road network.



Many of these roads are heavily trafficked by tourists, particularly in summer months (the state parks are adjacent to the much-visited Great Ocean Road). But in economic terms, not all of the profits from such tourism activity will be internalised within the Colac-Otway Shire; nevertheless, maintenance of these roads is the Shire's responsibility and competes directly for maintenance, renewal and safety improvement work across the wider 'rateable' Shire network.

7. THE ROAD CHARGING MODEL DOES NOT LINK CHARGES TO INVESTMENT

A recent Federal Department report argued that:

A consensus is emerging about some of the key measures that need to be taken to improve council finances in Australia. These include that councils should ...develop and publish service policies and standards and set rates and charges that are sufficient to sustain those services and standards in the long term⁴⁰.

This model works well for certain parts of local government infrastructure like water and sewerage, where service standards can be negotiated and regulated, and where the public is made aware of the rates and charges that will apply for use of the infrastructure: when an individual does not pay the appropriate rates and charges for use of the water or sewerage infrastructure, they can be excluded from the system until they pay.

The overall legal framework that applies to roads may be no different, but road charging does not yet work like water and sewerage markets in Australia. Road users pay registration fees and fuel excise, but the money that is generated by the charges paid by cars and trucks travelling on Australia's roads – including rural local roads – is not returned to the places where the driving took place for reinvestment in these areas: instead, fuel excise is sent to Federal Treasury where, as consolidated revenue, it is subject to a bidding process to return as road funds. State registration charges are in most cases similarly sent to state treasuries to be



The charges that vehicles pay for their road use aren't sent directly back to a road fund, so targeted investment in the local roads that matter is very difficult to achieve. (Photo courtesy Sandy Carrol photography).

sent to consolidated revenue⁴¹.

This means that rural local governments have no ability to set charges for road use, or develop service policies and standards of road condition and construction that road users can expect in return for paying for this road use. Equally, neither industries like farming, nor transport firms, nor local communities can have any real input into how the local road network should be shaped for the future.

Is road charging reform likely?

Road pricing reform affects all roads, not just local ones, but although COAG agreed to embark on a reform process some years ago, actual reform is moving only slowly in Australia. As yet, there is no signal that local governments will be likely to have any control over the revenue that has been generated on their roads. The slow pace of this reform means that unlike water and sewerage infrastructure, local roads continue to require funding from other sources, such as Federal and State grants, direct support payments such as the *Roads to Recovery* program and high levels of own-source local government revenue, such as rates.

40. Department of Infrastructure, Transport, Regional Development and Local Government - Local Government Report 2007-08 (*Report on the Operation of the Local Government (Financial Assistance) Act 1995*) recommendations p. 51.

41. Although in Queensland (by convention) and in New South Wales (by statute) all registration fees are hypothecated directly to road funds.

8. HARD TO ATTRACT PRIVATE INVESTMENT IN LOCAL ROAD INFRASTRUCTURE

In 2003 the House of Representatives Standing Committee review of cost shifting and local government funding ('the Hawker Review') pointed to private sector investment in infrastructure as a key future focus for securing better local government infrastructure funding outcomes for the future.

But the review also noted that for private investment to be successful, assets would need to generate a return on their investments, and for roads in particular, it acknowledged that this was very difficult: examples of successfully privatised local roads were hard to find. In a submission to the standing committee, SGS Economics and Planning Pty Ltd contended that 'particularly rural and remote councils faced difficulty in attracting private sector interest'⁴².

Why are some rural roads not attractive private investments - and how could this change?

This assessment is understandable, but it is also at odds with the amount of productive and reliable freight activity that occurs on some rural local road networks - many agricultural products are almost entirely moved by heavy vehicles. Equally, a growing mining sector is becoming heavily dependent on a number of key rural road arteries. The challenge is in finding a way to develop revenue streams from these activities.

A first important step towards this outcome is in having clear road asset management condition reports available for private investors to consider, so that future investment and charging arrangements could be examined more clearly and oversighted by a regulator.

42. House of Representatives Standing Committee on Economics, Finance and Public Administration (2003) *Rates and Taxes - A Fair Share for Responsible Local Government* p. 73.

9. NO NATIONAL REPORTING OBLIGATIONS FOR LOCAL ROAD INFRASTRUCTURE

The Review of NSW Local Government Sustainability in 2006 made a point of noting the important differences between rural and urban local government:

'Many rural councils...have ageing road, water and drainage infrastructure, and coupled with small population subsequently have a small rating base from which to fund maintenance and renewal. In stark contrast, most metropolitan councils have lesser road infrastructure to maintain, denser concentrations of people, a high rating base and no responsibility for water utilities'⁴³.

By contrast, these distinctions are perhaps not appreciated as keenly at the Commonwealth Government level, predominantly because there is no requirement to send individual local road asset management reports and planning data to Canberra. For the most part, the Commonwealth Government appears to receive (and report on) mostly homogenised, state-level information about local road assets. This ensures that the depth and detail of the problems in rural local roads cannot receive the level of attention that it should at the national level. In this sense, Australia's highest level of government and largest single spender on local roads is the most detached from the facts about the state of this asset.

The dangers of taking an 'overall' view of local roads

Not appreciating the complexity of different local road problems in different settings can lead to questionable national policy outcomes: In 2003, the Federal Department of Transport and Infrastructure advised the House of Representatives Standing Committee on Economics, Finance and Public Administration in their

review into local government finances that:

'While some councils rely heavily on FAGs (ie Financial Assistance Grants), the local government sector as a whole is in a sound financial situation... local government has maintained its share of revenue from its own sources, despite providing an increased range of services (and) its overall debt levels have declined in recent years..indeed, in 2000...total cash, deposits and lending exceeded gross debt'⁴⁴.

The Australian Local Government Association was prompted to caution the standing committee on reading too much into this statement, as 'conclusions cannot be drawn from an analysis of aggregated data': it transpired on closer (ALGA) analysis that 'the surplus was contributed to by a relatively small number of councils, including Brisbane City Council which accounts for almost 10% of the total surplus'.

This Commonwealth government statement also displays a limited appreciation of how poor local government asset valuation and depreciation practices are obscuring the true size of the infrastructure funding gap and renewal challenge. In 2006 Access Economics advised the Allan Inquiry into NSW Local Government that:

'Existing shortcomings in the financial governance policies and practices of NSW councils that contribute to chronic operating deficits and mounting infrastructure renewal backlogs deserve to be addressed. These policies and practices include those relating to the under-funding of depreciation, poor asset management systems, and the inadequate monitoring of and reporting of a council's financial performance'⁴⁵.

Such statements are confronting, but ultimately constructive.

43. Independent Inquiry into the Financial Sustainability of NSW Local Government ('The Allan Inquiry') (2006) *Are Councils Sustainable? Independent Inquiry into the Financial Sustainability of NSW Local Government Final Report* p. 114.

44. House of Representatives Standing Committee on Economics, Finance and Public Administration (2003) *Rates and Taxes – A Fair Share for Responsible Local Government* p. 91.

45. Access Economics (2006) *'Local Government Finances in NSW: An Assessment'*, quoted in the Final Report of the Independent Inquiry into the Financial Sustainability of NSW Local Government ('The Allan Inquiry') (2006) *Are Councils Sustainable?* p.289.



CASE STUDY: POOR NATIONAL METRICS ONLY DELIVER POOR OUTCOMES FOR RURAL LOCAL ROADS

The *Annual Local Government Report* analyses local road trends by drawing on state level reporting data. But this view cannot reveal the true plight of rural local roads. In its 2007-08 *Local Government National Report*, the Federal Department announced in bold type that since the previous year total local road length had been *maintained*⁴⁶.

No mention was made in the report of whether within this statement there had been any shift in the ratio of total sealed versus total unsealed local road length since the previous year – yet the matter of whether a road is sealed in bitumen (and therefore



In December 2008, this truck took four days to be dug out of a muddy road to deliver food supplies to a remote community on the QLD/SA/NSW border. It's unlikely the driver of this truck will be interested in a Federal Government report announcing that in the year just past, total local road length has been maintained. A program to identify and seal the most freight-intensive unsealed roads would be more welcome news (Photo: courtesy Andrew Roberts www.bitethedust.com.au).

passable in most weather conditions) or simply a soil-based track is a *vital* question to ask in order to make useful judgements about whether the total asset has become more or less safe and productive from the previous year.

46. Department of Infrastructure, Transport, Regional Development and Local Government (2008) 2007-08 Local Government National Report (*Report on the Operation of the Local Government (Financial Assistance) Act 1995*). P. 7.

10. GRANT FUNDING METHODOLOGY DOES NOT ADDRESS PRODUCTIVITY

The current methodology for allocation of *Financial Assistance Grants* (FAGs) has no relationship to the road productivity (historical or potential, or both) of a local government area. Instead, current processes focus on assessing relative needs of local governments, mainly from an equity perspective. This means that rural local government roads with highly productive history or potential are not granted any priority consideration for road funding.

How does the FAG system work now?

The *Local Government (Financial Assistance) Act 1995* facilitates funding grants to local government *via* the Local Government Grants Commission in each state. These grants are untied and come in two types: general purpose assistance grants and untied road funding grants.

The *Act* primarily attempts to address equity considerations and ensure that all councils receive some funds, with the most disadvantaged councils receiving relatively the most funding. While efficiency is a stated motive, this is more to do with ensuring councils spend the money where they should; it is not, for example, about ensuring that councils with productive freight potential in their road asset are granted funds which can unlock this productivity.

The ARRGG does not question the horizontal equity objectives of the current FAG process. But a lack of productivity-driven criteria means that funding is not well targeted into road investments that improve economic activity. This is a particular concern for rural councils whose viability rests on efficient agricultural production.

CASE STUDY: PRODUCTIVITY IS NOT THE FOCUS OF THE COMMONWEALTH ROAD GRANTS PROCESS

How do highly-productive rural local governments fare under the current FAG system?

Together, 2006 census data shows that the local government areas of Burdekin, Waggamba and Bowen produced \$855.2 million of agricultural product in 2006 – this represented 10% of Queensland’s total agricultural production value for that year, based on ABS agricultural commodities values.

By this measure, these 3 councils, with a combined population of just 34,208 people – were remarkably productive. This productivity was underpinned by the relative efficiency and safety of just under 4,000 kilometres of sealed and unsealed local roads. Despite the obvious productivity of these communities, whether



In 2006, 10% of Queensland’s total agricultural product came from just 3 councils - Burdekin, Bowen and Waggamba – yet these 3 small local government areas fared relatively poorly when it came to receiving local government assistance grants from Canberra. The current grant system is understandably focussed on horizontal equity (ie fair grants for all) - so a supplementary system is needed to address potentially productive rural local roads and thereby unlock further rural industry efficiencies.

measured in total grant funding received per capita or per kilometre of road, the following tables make it clear that neither the relative productivity of Burdekin, Waggamba and Bowen LGAs, nor their contribution to the wider economy, have any significant relationship to the grants they will receive:

Table 4: Local government funds received on a relative needs basis - ranked per capita

Council	Per km \$ grants received	State ranking (out of 155 councils)
Diamantina	7,127.60	1
Waggamba	724.37	51
Bowen	83.90	113
Burdekin	47.24	128

Source: Local Government National Report 2005-06. Appendix E ‘Ranking of local government bodies on a relative needs basis 2005-06’.

Table 5: Local government funds received on a relative needs basis - ranked per km

Council	Per km \$ grants received	State ranking (out of 155 councils)
Redcliffe	2,293.44	1
Burdekin	537.15	64
Bowen	488.60	79
Waggamba	413.64	128

Source: Local Government National Report 2005-06. Appendix E ‘Ranking of local government bodies on a relative needs basis 2005-06’.

The ARRG believes public policy in this field must be prepared to discuss how highly-productive rural local government areas can be better served by the grants process in future, *without detracting from horizontal equity outcomes across local governments*. The suggested reforms section of this paper (Part 3 - The road ahead) expands on this subject.

PART 3 THE ROAD AHEAD

THE ROAD AHEAD: 5 KEY REFORMS FOR THE BETTER

Given the aforementioned key causes of the rural road crisis, the ARRГ considers 5 major reforms necessary, as set out below.

These reforms are not merely a 'grab for cash'. As this report has endeavoured to establish, there are major problems in rural road infrastructure planning, management and funding systems alike; more money is certainly a vital part of the solution, but all Australians have a fair expectation that scarce taxpayer revenue is spent as efficiently as possible by all levels of government.

The reforms proposed below represent added responsibilities for both local governments and higher governments; the ARRГ believes that this *quid pro quo* approach will start to resolve the rural local road crisis and promote far better management of and investment in rural local roads for the future.

- 1 Mandate 10-year asset management plans for local governments;**
- 2 Retain current local road funding programs as baseline;**
- 3 Establish an Independent National Road Portfolio Manager;**
- 4 Establish a National Rural Local Road Productivity Fund**
- 5 Build management skills and research capacity in roads**

1. MANDATE 10-YEAR ASSET PLANS FOR LOCAL GOVERNMENTS

Introduce compulsory 10-year infrastructure asset management planning which would be linked to local government financial plans.

It is vital that where it is not already in place, jurisdictions adopt mandatory 10-year infrastructure asset management plans which link to the main financial plan of the local government in question. This reform, if backed with capacity building, would allow for the establishment of a national road portfolio manager and would also help councils to better defend their decision to fund road asset infrastructure in the face of many competing pressures. Ultimately, the presence of more consistent and professional road asset management plans, with consistent approaches towards asset valuation and depreciation, promotes trust across different levels of government. As Access Economics noted:

'Improving such policies and practices would not only prompt councils to do more to ensure their financial sustainability, but that (sic) might also convince other governments that increasing grant funding to local government could after all be a prudent use of taxpayer funds'⁴⁷.

Consistent asset management planning may open private investment opportunities

Mandatory and consistent road asset plans are also vital for any future approaches to private investment in local road assets, as they establish an asset condition baseline from which future investors in or operators of parts of the road network can establish pricing and costing. This is an essential part of any privatised approach to public infrastructure.

The Hawker Review of 2003 made much of the need to look towards private sector involvement in bridging the local road infrastructure gap. But private sector involvement in roads first requires that the condition of the current asset is known and documented. Looking ahead, good asset management plans at local government level can also be a foundation stone to build towards any future private sector road pricing arrangements; such plans may also be a valuable basis on which to consider public-private partnerships.

47. Access Economics (2006) 'Local Government Finances in NSW: An Assessment, quoted in the Final Report of the Independent Inquiry into the Financial Sustainability of NSW Local Government ('The Allan Inquiry' 2006) *Are Councils Sustainable?* p.289.

CASE STUDY: IS NATIONAL LOCAL ROAD ASSET MANAGEMENT REPORTING REALISTIC?

How practical is national mandating of road asset management plans?

Mandating such plans undoubtedly poses significant compliance challenges and requires a considerable skill base for success. But it is worth recognising that for some time now local government has been headed in this direction and there is reason to suggest that solid foundations exist for a successful national reporting regime to take hold:

Training and uptake of local government asset management systems is substantial

A majority of Australia's 555 local government areas are either fully subscribed to, or beginning on the training path towards managing rigorous asset management systems:

- By July 2010, over 250 local governments nationwide had become part of the NAMS.PLUS program for asset management. 2 + 2 day training programs for local government staff are being rolled out by IPWEA across the country to allow local government to use this world-standard program to its full potential;
- By July 2010 Western Australia's WAAMI asset management program, which shares many features with NAMS.PLUS, had around 85 councils either already participating in training or registering interest to do so;
- Other State programs such as Victoria's STEP system and Queensland's LGASSET program also have significant council support and training pathways in place⁴⁸.



The pace of improvement is impressive⁴⁹

Local government momentum towards asset management is building. In New South Wales, a longitudinal survey of almost all local governments reported that in 2005, 35% of local governments made no use of International Infrastructure Management Principles. By 2008, the same survey reported that this figure had nearly halved to just 18%. Across the same time period, the amount of councils who reported absolutely no use of road asset management plans again halved from 26% in 2006 to just 13% in 2008.

The number of local governments which reported successful adoption of such asset management plans grew from 26% in 2005 to 38% in 2008. This positive shift is in part driven by state government reforms to mandate such plans for their local governments, but it is also a testament to excellent ongoing capacity building in this sector.

Notwithstanding this clear progress, the ARRG acknowledges that a national road asset reporting requirement is a reform that will take time to achieve and may not be reached by all councils easily in the near future. Nevertheless, the alternative - doing nothing on the basis that the reform is beyond local governments' collective abilities - is not acceptable to the ARRG. The first step to more efficient management of any asset involves assembling clear and comprehensive data and analysis on that asset. A national approach to understanding the local road problem is overdue. On the basis of current capabilities, getting there appears to be predominantly a question of collective commitment.

48. Current estimates sourced from National Asset Management Strategy Committee of Institute of Public Works Engineering Australia (July 2010) *Report and Decisions paper* p. 1; p.8.

49. All figures quoted in this section are drawn from the results of the Institute of Public Works Engineering Australia (2008) *Road Asset Benchmarking Project* NSW - which includes longitudinal comparisons drawn from combining the 2008 survey with the 2005 survey which was conducted on the same basis.

2. RETAIN ALL CURRENT LOCAL ROAD FUNDING PROGRAMS AS BASELINE

Ensure that the funding gap is eventually bridged by retaining good programs and adding new ones - not substituting one for another.

The ARRG considers it vital that in pursuing reforms to rural local roads, Federal, State and Territory treasuries do not consider 'trading-off' past achievements for new ones. Excellent outcomes have been achieved by Specific Purpose Payment programs such as *Roads to Recovery*. Such programs are baseline requirements for addressing the crisis in years to come; new funding mechanisms should be viewed as a complement to *Roads to Recovery*, not a substitute for it. In 2004-05 the Federal Transport Department estimated:

'the national local roads deficit has fallen from \$644 million per annum before the Roads to Recovery program was introduced to an estimated \$404 million

*per annum after the program was introduced. This is consistent with earlier predictions that the Roads to Recovery program would not clear the backlog of local road projects but would slow the rate of deterioration on the local roads system by about half*⁵⁰.

Research suggests that Roads to Recovery delivered an average overall project benefit cost ratio of 1.8⁵¹. This program will need to be retained as baseline funds to local rural roads for many years to come. Equally, a net increase in Federal funding to address rural local road productivity will be worthless if State and Territory governments take this opportunity to remove their own funding levels for rural local roads. All 3 levels of government must recognise that the problem requires a *quantum* increase in targeted management and funding.

50. Department of Transport and Regional Services - Local Government Report 2004-05 (*Report on the Operation of the Local Government (Financial Assistance) Act 1995*) p.80 note (i) to table 4.2.

51. Commonwealth Department of Transport and Regional Services and the Australian Local Government Association (2003) *Report on the Roads to Recovery Program* p. 43.

3.

ESTABLISH A NATIONAL ROAD PORTFOLIO MANAGER

Via Intergovernmental Agreement, establish an independent entity that can oversight all LGA road asset management, draw attention to emerging local road problems and be in a position to consider strategic investments in the local rural road network.

- Even if all local governments nominally agree to produce 10-year asset management plans, what will the quality of these plans be like?
- Where do local government road asset management plans go, once written?
- Who is capable of truly independent verification of these plans – for example, to ensure they are using appropriate approaches to asset depreciation or valuation?
- Who can identify councils that are experiencing significant difficulty in these areas and ensure they receive the engineering and financial capacity building they might need?
- Who analyses asset plan data to detect emerging trends in local road funding?
- Who alerts the State and Commonwealth Governments to these emerging issues, so that national policies can meet emerging or otherwise hidden challenges head on?

At present, no institution fulfils these roles nationally.

Central collation and verification of plans improves accountability and accuracy

The ARRГ believes this situation would change for the better through the establishment of an independent statutory supervisor for the collation, review and verification of all local government infrastructure asset plans and the coordination of improvements to how different levels of government interact to tackle local road issues. This reform may be unpopular with some quarters of local governments, but the ARRГ sees it as a necessary step to building greater professionalism and accountability into the rural local road funding process. As the Allan Review of NSW local government noted

'Asset registers provide the foundation for good asset management. Council's capacity to effectively manage infrastructure is limited if asset registers are incomplete or inconsistent'⁵².

The ARRГ believes this statement is applicable nationally and supports the idea of a single asset supervisor for local road infrastructure. Similar sentiments were expressed by the committee conclusion of the Hawker Review that:

'if the Federal Government provides untied funds to local government, it must be assured that local government is doing its best to maintain its essential infrastructure'⁵³.

52. Access Economics (2006) 'Local Government Finances in NSW: An Assessment, in the Final Report of the Independent Inquiry into the Financial Sustainability of NSW Local Government (2006) Are Councils Sustainable? p.289.

53. House of Representatives Standing Committee on Economics, Finance and Public Administration (2003) Rates and Taxes – A Fair Share for Responsible Local Government p. 74.

COMMENT: IS A ROAD PORTFOLIO MANAGER JUST ANOTHER NEW INSTITUTION FOR ITS OWN SAKE?

It may be tempting for some to criticise the ARRГ recommendation for a national road portfolio manager as an easy answer to a difficult problem: no doubt Australia's bureaucratic landscape is littered with new agencies that were built with good intentions, but in practice do little more than create a 'post box' for the problem they were established to fix, rather than driving genuine reforms. A national road portfolio manager is certainly the right reform for more efficient road asset management. As discussed below, this approach has a sensible and efficient precedent in the rail sector.

Establishing this new body need not represent a



The ARRГ is not advocating building another transport institution for its own sake. The ARRГ only wants the right institution - which for local roads, does not exist at present. Its establishment might be expected to be offset by wider strategic reforms to the architecture of road and transport bureaucracies.

net addition to bureaucracy: the ARRГ would expect that any move to establish a national road portfolio manager would be offset by reforms to the myriad of current Federal, State, Territory and Local government road and transport agencies, to establish a better and more efficient means of genuine road infrastructure asset management, planning and funding.

CASE STUDY: PRECEDENTS FOR INDEPENDENT INFRASTRUCTURE PORTFOLIO MANAGEMENT

There are strong precedents for centralised asset supervision in the Australian rail industry

This approach has a successful and relevant precedent in the rail industry here and overseas. In New South Wales, for example, rail line operators must maintain asset condition and management plans known as Line Community Service Obligations (Line CSOs).

These plans are in turn verified by an independent rail supervisor, to ensure that all parties are playing



Following the Australian rail industry's independent asset management processes could improve local road management and funding, as the true costs facing the road asset would finally be transparent.

their role in maintaining the rail asset to safety and maintenance levels in line with rail access contracts with train operators. An established body of law and structural policy in the railway line CSO arena could be used to advantage to assist in building a national road portfolio manager.

4. ESTABLISH A NATIONAL RURAL LOCAL ROAD PRODUCTIVITY FUND

Establish an additional rural local road fund to invest in meritorious, productivity-enhancing projects; have this fund administered by a national road portfolio manager.

As discussed earlier, traditional current FAG distribution methodology puts a heavy emphasis on ensuring equitable outcomes across all local government areas. The ARRG does not question the benefits of this approach. But if this is the only criterion on which grants are distributed, it is very difficult to see how councils facing major productivity barriers or future productivity opportunities on their road network can gain efficient access to higher government grant funding.

For this reason the ARRG proposes that a distinct, supplementary local road fund should be established, to be administered by the national road portfolio manager directly.

Like the national road portfolio manager, this fund could be established *via* Intergovernmental Agreement; the focus of this fund would not be on sheer passenger vehicles movements numbers. Instead, this fund would focus expressly on funding roads with high volumes of road freight activity (this approach would be consistent with the thinking

behind a *National Freight Network Strategy* which is currently under consideration by Infrastructure Australia, see part 4 below). Such targeted funding of rural local roads could promote strategic investments to support the future productivity of Australia's key rural industries: a strategic all-weather road network for Australia's northern tropical fruits sector, to ensure these products can always reach their southern markets in a timely fashion; key high-productivity road networks to serve Australia's growing feedlot and meat processing sector; strategic investments in road to complement the changing rail network for the movement of grain.

Through this local road productivity fund, councils - or groups of councils working in alliance with local and regional industries and communities - would receive funds based on the relative productivity outcomes of their local road maintenance and improvement projects.

The ARRG envisages that access to the fund would be dependent on lodgement of a road asset management plan to the national road portfolio manager, to promote accountability and transparency. Projects from this fund would be governed by cost-benefit style assessments.

CASE STUDY: A STRATEGIC APPROACH TO GRAIN LOGISTICS REFORM STARTS WITH LOCAL ROADS



Current local road management and funding is neither national nor strategic. A national rural local road productivity fund, administered by an independent national road portfolio manager, has the potential to do far more than simply add to the quantum of funds available for local government roads. If established and used properly, such a reform can bring about highly strategic and sustainable reforms to some of the most vexing issues in rural freight infrastructure. The grain freight task in northern New South Wales is a good example of the potential of such a reform:

The east coast grain transport task – a complex and changing logistics challenge

In 2009, Australia's eastern states alone produced \$4.376 billion in wheat, oats, barley and sorghum⁵⁴. This logistics task is both complex and changing: in the post single-desk marketing environment, forward-trading opportunities in the global market for grain exports mean that Australian grain might be stored and sold long after harvest to take advantages of changes in market prices across the year. Those involved in this logistics task - particularly the larger growers, grain

handlers, road and rail transporters and port operators, need to make long-term and significant investments in grain storage sites, in railways and in port infrastructure. Ideally, such investments should be served by all-weather, year-round transport infrastructure. Combined with this more complex modern business cycle, some of the traditional grain branch railways in northern NSW that have carried much of this task in the past have fallen to disrepair, while at least one of its traditional export ports has also become less viable for future grain freight access, in part as a consequence of competition from a highly lucrative coal trade.



Grain freight begins its journey on rural local roads, but strategic planning and investment has traditionally ignored this part of the chain. A rural road productivity fund would address this oversight.

Local roads are the start of the journey and influence 'downstream' logistics problems

All grain products begin their journey on rural roads. Grain produced for livestock feed – almost a quarter of the total grain task in NSW – is almost entirely transported by road.

Making major grain storage and rail infrastructure

54. Australian Bureau of Statistics Cat No 7503.0 *Gross Value of Agricultural Commodities Produced 2008-09* p.6

CASE STUDY: A STRATEGIC APPROACH TO GRAIN LOGISTICS REFORM STARTS WITH LOCAL ROADS CONTINUED

investments without an ability to see and influence rural road investments at the same time is a very inefficient way to plan and invest in the whole grain transport and logistics supply chain. Yet to date, this has been the reality facing farmers, grain consignors, road and rail and port operators alike – nobody has been able to plan and invest in long-term strategic investments across this supply chain.

The Moree Plains road freight dilemma- and an innovative solution

The region around Moree in northern New South Wales is one of the country's biggest grain producers. In 2006, the national census revealed Moree Plains Shire Council alone oversaw \$532.5 million in agricultural production, much of which was grains. The grain task in this region has traditionally been serviced by at least two grain railways – one operated by Queensland Rail which runs from western Queensland via Goondiwindi (north of Moree) and on to the Port of Brisbane. The other line runs further south, to the town of Weemelah, west of Moree, and back to the port of Newcastle.

A changing logistics environment

In 2009 the *NSW Grain Freight Review* found that the Weemelah branch line presented negative net present values and subject to further successful negotiation with the owners and operators, would need to be closed⁵⁵; the same review found that the situation on this line was exacerbated by uncertain future for grain at the Port of Newcastle, which was caused by increased competition at that site from lucrative coal freight movements as well as ageing grain handling infrastructure⁵⁶.

A more strategic approach

The Moree region therefore finds itself in a difficult situation. In response, the Moree Plains Shire Council decided to develop a strategic road network upgrade that could open up new and far more productive grain transport by road in response to the following drivers:

- Local government engineering concerns about



The fact that some key grain routes in the Moree district were partly black soil roads, impassable when wet, was only one factor that drove a more strategic grain road upgrade plan in Moree.

the state of the current road network to carry the grain task – the current road towards Mungindi was largely black soil unsealed road, passable only by four wheel drive vehicle when wet;

- The representations of local producers and others in the grain sector;
- Long-term industry investment uncertainties surrounding grain storage;
- The successful approaches evidenced over the border in Queensland, where government investment in higher mass limits on some heavy vehicle networks was allowing the roads to deliver freight with more productive heavy vehicles; and
- The uncertainty over the Moree Shire's traditional southern grain branch railway (at Weemelah) added to concerns about the long term viability of the port of Newcastle.

The map on the following page shows a draft high productivity road network – a wider and thicker bitumenised road surface (purple roads) that could carry much longer heavy vehicle combinations of grain more safely and efficiently into the viable rail hub of Goondiwindi/Boggabilla - from as far afield as Mungindi and Weemelah - for subsequent rail freighting to the Port of Brisbane. This upgrade would give southern grain growers disadvantaged by any eventual Weemelah rail line closure access to a much more efficient northern road freight route to an alternative rail hub (Goondiwindi) which runs to a major grain export port (Brisbane). The upgrade may also encourage grain consignors and producers to make longer-term grain storage investments along a high productivity all-weather road network.

55. Department of Infrastructure, Transport, Regional Development and Local Government (2009) *New South Wales Grain Freight Review* see figure 6, page 38 Results of the quantitative benefit cost analysis.

56. See page

CASE STUDY: A STRATEGIC APPROACH TO GRAIN LOGISTICS REFORM STARTS WITH LOCAL ROADS CONTINUED

The Moree initiative in the context of *NSW Grain Freight Review* recommendations

The merit of such forward-thinking, alliance-based initiatives becomes clearer when the expert advice of the 2009 *NSW Grain Freight Review* is considered. That review made the following findings and recommendations⁵⁷:

- The Weemelah Branch Line is NPV-negative and the future of the Port of Newcastle in the grain supply chain is uncertain;
- Current road access and funding arrangement are impediments to efficient grain movement;
- A high-productivity vehicle grain road network should be the focus of investment;
- Planning for such a network should involve governments working in consultation with the whole logistics chain;



Investing in a high productivity road network from Goondiwindi to Mungindi and Weemelah (see preceding map) opens road transport up to much longer and more efficient road freight vehicles (above) in turn linked to a 'net present value-positive' rail hub. It also allows growers and consignors to make long-term storage infrastructure investments along this productive all weather grain road network (photo courtesy of Woods Grain www.woodsgrain.com.au).

- Any future grain line closures should be accompanied by a clear definition of the preferred alternative road routes and a funding plan (negotiated by all affected road owners) for improving these routes to accommodate the additional traffic load; and
- The Commonwealth government should take a greater strategic role in the development of the east coast network (particularly rail).

The Moree upgrade plan, although only in draft form, shows potential to address all of these outcomes. Whether it is ultimately funded or not, it is an example of smarter thinking about a difficult problem.

57. Department of Infrastructure, Transport, Regional Development and Local Government (2009) *New South Wales Grain Freight Review* formal findings and recommendations pp, 7-14.

REALITY - SUCH INITIATIVE HAS NO PLACE UNDER CURRENT FUNDING STRUCTURES

Under current road funding structures, there is little or no incentive for local governments or local freight users and transporters to work together to deliver innovative solutions that shape the future local road network:

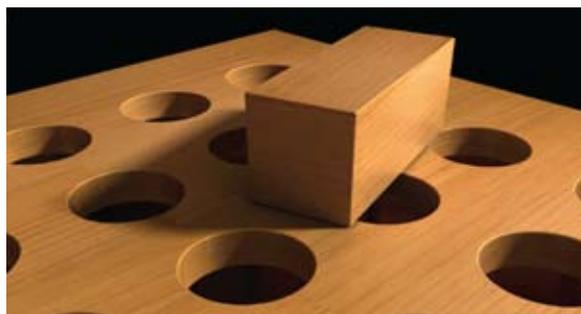
- Such major road network upgrades are beyond council own-source revenue capacity;
- Traditional FAG grants seek horizontal equity outcomes, not targeted productivity gains;
- Current road funding gaps mean the scale of such projects places them beyond the reach of most councils;
- A lack of national road portfolio manager locks out industry from demand planning of the network: neither *Roads to Recovery* nor FAG grants encourage councils to work in alliance with local transport users, let alone permit the freight industry itself to develop their own road plans for funding consideration;
- No consistent road asset management plans and condition reports mean there can be no 'like for like' investment comparisons with the local rail asset to decide which represents the smarter long-term investment candidate.

The need for a national rural road productivity fund is clear

Only a national rural local road fund with an express objective of enhancing productivity through efficient alliance investments can deliver this sort of project. Fund supervision by an independent road portfolio manager helps to ensure that the asset baselines that form the basis of the funding plan are reasonable. The model would allow grain consignors, port and rail operators to work with local road transporters and producers to make the safest and most efficient upgrades to the existing network. Transparent cost-benefit analysis could then be established to underpin the case for such upgrades, where there were more funding candidates than funds available.

The cost of 'business as usual'

Without such reforms, the northern New South Wales grain industry:



- Will remain mired in indecision, with study after study commissioned about rail line funding and port access challenges but with no decisive action forthcoming;
- Will extract little extra productivity on the ailing local road network – road freight operators wanting higher productivity vehicle access will continue at loggerheads with local road asset owners – owners who have no access to the sort of funds that would pay for improved truck access on degraded local roads;
- Grain consignors and producers will not be able to make long-term storage infrastructure investments with any confidence;
- Existing local road assets, funded only *via* a piecemeal FAG and/or *Roads to Recovery* basis, will continue to degrade, while council own-source revenue continues to be stretched by other expanding service pressures and unable to fund strategic networks;
- As foreshadowed by the *NSW Grain Freight Review*, without a balancing investment in roads, the continuing difficulties in rail infrastructure will lead to 'indiscriminate use of roads by heavily laden road vehicles (which will) impose a heavy burden on local governments and communities'⁵⁸.

The need for a national road portfolio manager

Local roads are the start of the journey for rural commodities. A national road productivity fund overseen by a national manager to encourage industry participation in planned development will promote more strategic investments in the local road network, creating downstream efficiencies for strategic rail and port networks.

The ARRG believes that its proposed reforms offer a much more sensible structure for dealing with these significant strategic rural logistics challenges. There is little doubt that strategic road improvements like the Moree example are well within the capability of many rural local governments, working with their customers and producers. Higher governments must facilitate these efforts by offering a road funding mechanism that encourages such innovations.

58. Department of Infrastructure, Transport, Regional Development and Local Government (2009) *New South Wales Grain Freight Review formal findings and recommendations* p, 11.

5. BUILD MANAGEMENT SKILLS AND RESEARCH CAPACITY IN ROADS

Continue to capacity build using a centre of excellence in asset management and planning approach; establish links between agricultural productivity and roads.

Reforms to asset management planning and the establishment of a national road asset supervisor would place additional skills expectations on many local councils. For this reason the ARRG would advocate that current efforts towards 'centre of excellence' objectives in road asset planning and management be redoubled and that all councils be assessed by the national road asset supervisor over time to establish their skills levels in developing and maintain these plans.

In this respect, the value of bodies like the Institute of Public Works Engineering Australia cannot be underestimated: IPWEA represents around 2,000 professional and technical staff, consultants and contractors, the great majority of whom are employed

in and familiar with local government infrastructure management; the institute has strong alliances with similar professional technical expertise worldwide. IPWEA provides critical training to local council staff in asset and financial management; this role will need to expand to accommodate a national local road asset management reporting regime.

It is also of concern that the linkage between rural road infrastructure and overall agricultural productivity is not yet well enough understood – yet as discussed earlier in this report, freight is a very significant input cost to agricultural outputs. Understanding this relationship better will inform better rural road funding methodologies for the future. More research is required, using national data sets that can be developed from mandatory asset management planning as well as insights gained through finally having a national view of this class of infrastructure.



PART 4 A CONSENSUS FOR REFORM

A CONSENSUS FOR REFORM: WIDER DEVELOPMENTS IN THE ROAD DEBATE

In advancing its reforms to the local road crisis, the ARRГ is mindful that its policy proposals must live in the context of broader existing and emerging reform efforts by governments. It is always worth asking the question ‘what do others think about these issues and what are they doing about them? The ARRГ believes that wider thinking about road infrastructure pricing, investment and management gives great encouragement to the reform proposals in this paper:

‘Henry Tax Review’

The proposed ARRГ reforms appear to deliver directly on the recommendations of *Australia’s Future Tax System* (final report), which advocated that:

‘Governments should continue to reform road infrastructure provision, applying economic assessment to investments comparable to that for other forms of infrastructure’.

(*Australia’s Future Tax System* final report section E 3-5: *Guiding investment in roads* recommendation 67)

‘COAG should develop a National Road Transport Agreement to establish objectives, outcomes, outputs and incentives to guide governments in the use and supply of road infrastructure. COAG should nominate a single institution to lead road tax reform, and ensure implementation of this agreement’.

(*Australia’s Future Tax System* final report section E 3-6: *Institutions to support efficient use and supply of roads* recommendation 68).

Infrastructure Australia’s Freight Infrastructure Reforms

The ARRГ’s reforms also appear consistent with

Infrastructure Australia’s *National Ports Strategy* and particularly to its exposure draft work on a *National Freight Network Strategy*, where the condition of key freight infrastructure nationwide is assessed so that public and private sector can make future planning and investment decisions on these networks, which could include private investment.

COAG Road Reform Plan

The ARRГ’s proposal to mandate lodgement of local government road asset plans to a National Road Portfolio Manager would seem to be a key facilitator for the COAG Road Reform Plan, which is attempting to reform the pricing system for roads. Without clear and consistent nationwide assessments of road infrastructure condition across the local road network, it would surely be impossible to establish a fair basis for accurate marginal cost pricing of vehicles on local roads.

Local Government Reform Fund and Local Government Sustainability Frameworks

The Federal Government already funds capacity building to help local governments manage and report on their infrastructure assets professionally via the Local Government Reform Fund. In 2006 Local Government and Planning Ministers Council agreed to develop national frameworks for asset management. These reforms are good, but progress is too slow. ARRГ proposes taking them to their logical conclusion. Until the asset is managed nationally, the size and shape of the problem will not be known and efficient future investments cannot occur.



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