Road Maintenance in Australia

2011 – 2026

"Road maintenance activity has surged on the back of flood-related works in 2010/11, but is now set to decline in real terms as remediation works wind down, government budgets remain tight and cost pressures rise. Longer term, the rising maintenance backlog and developments in procurement are expected to deliver stronger growth outcomes for contract work."

EXTRACT TO INDICATE THE GENERAL NATURE OF THE REPORT

INFRASTRUCTURE AND MINING

BIS Shrapnel
BUSINESS RESEARCH AND FORECASTING

Contents

Tables

Charts

1. INTRODUCTION

1.1 Outline of the report

Welcome to the 11th edition of *Road Maintenance in Australia.* This report is intended to aid the medium and long term planning and budgeting processes of public and private contractors for road maintenance, as well as suppliers of materials and equipment for the road industry.

Road Maintenance in Australia provides the most comprehensive analysis available of the road maintenance sector. We have established an unparalleled database of maintenance activity back to the early 1970s, which gives us a superior knowledge base from which to forecast.

This report is a companion volume to our *Road Construction in Australia* report. There can be some uncertainty as to the exact distinction between construction and maintenance but our definition of maintenance, as a general rule, is as follows:

Maintenance can be described as work undertaken on an asset that improves the standard and/or quality of the asset but does not improve the original design standard.

Consequently, road rehabilitation or renewal type work is included as maintenance, rather than as construction. As detailed below, we use the National Transport Commission (NTC) expenditure reporting categories as the basis for our segmentation of the market by type of maintenance activity. Their category ‘Road Rehabilitation’ is included in our estimates of road maintenance, but their category ‘Asset Extensions/Improvements’ is considered construction.

Road maintenance was valued at $5.67 billion in 2009/10 (current prices). Road maintenance was traditionally between 50 and 70 per cent of annual road construction on average, but this percentage has fallen below 40 per cent as road construction boomed while road maintenance funding did not kept pace. We have compiled data on various sub-sectors from many sources and have undertaken market research to complete the picture of the road maintenance sector.

We present data that breaks the sector down in the following basic ways:

- **By type of road**
  - Rural Highways and Arterials (which incorporates the former National Highway System)
  - Urban Highways and Arterials
  - Local Government roads
  - Private Toll Roads
- **By type of maintenance activity**
  - Routine maintenance
  - Periodic maintenance
  - Rehabilitation
  - Bridge maintenance and rehabilitation
  - Other non-pavement maintenance
- **By who does the work — by contract versus in-house (day labour)**
- **By state and territory**

The diversity of types of activity within the road maintenance sector means that this detailed breakdown is important in understanding the drivers and outlook for activity. In particular, maintenance on each different type of road moves in different cycles and has different drivers.

For Australia and each state and territory, we provide a consistent set of tables:

- Total road maintenance activity by type of road;
- The value of road maintenance undertaken by contract, by type of road;
- Total road maintenance activity by type of maintenance activity;
- Value of each type of road maintenance activity by each type of road (although not for local government roads and private toll roads as these data are not available).

Our database has historical data to 1975/76 and an estimate for 2010/11. Forecasts are given annually for five years (to 2015/16) and for ten years (two five year averages: 2016/17–2020/21 and 2021/22–2025/26). Data and forecasts are shown on a state-by-state basis.

In this report, data and forecasts are generally in **constant 2009/10 prices**. Measurement in constant prices, or *real* terms, allows us to ascertain trends in the **volume** of work done, rather than just measuring the value (current prices). The only instances where we will use current prices are for market snapshots of the most recent year of road maintenance data (2009/10).

The report is presented in 10 chapters. Chapter 2 examines the drivers and outlook for each category of road construction at the Australian level, while the following eight chapters detail the prospects by state and territory. Given that many of our subscribers' operations are organised along state lines, the individual state sections are designed to be 'stand-alone' documents. The appendix contains definitions and historical trends in road maintenance in Australia.

1.2 The forecasting methodology

Our unique long time series of data has allowed us to analyse the underlying influences on each category of road maintenance, including both short-term cyclical effects and longer-term trends. This understanding helps in answering the crucial questions:

- What is happening in the road maintenance sector now?
- Why is it happening?
- What are the fundamental drivers of activity?
- Based on the outlook for these drivers, what are the prospects for each road category?
- What developments might influence these prospects?

Our forecasts are the result of extensive analysis and research into the road maintenance sector, including surveying road authorities and other organisations, not only for data, but to ascertain trends in spending, priorities and the possible impact of expenditure constraints.

Our forecasts derive from the combination of 'bottom-up' and 'top-down' approaches.

The bottom-up method involves analysing the expenditure programs of road authorities, government departments, local governments and private operators. To this end, we conduct surveys of road authorities and other organisations, as well as examine budget papers, annual reports and other published sources of information.

We also consider 'top-down' influences, such as Government revenue and funding cycles. Long term trends are considered, such as maintenance per road lane kilometre and the growth in the road system, which, in turn, relates to the level of new construction from year to year.

In the longer term, the level of maintenance activity depends on the stock of road assets and the condition to which we commit to maintaining the road system. Maintenance activity is considerably less volatile than road construction activity. The level of construction can fluctuate greatly from year to year, but all roads need to be maintained. So each new addition to the stock adds to the asset base and maintenance trends gradually upwards over time.

Overlaying this long-term trend is a short-term cycle (more subdued than construction or investment) based on funding levels and Government priorities or business conditions.

Government revenues and funding levels are important in determining road maintenance activity. In times of strong economic growth, and rising property markets, government revenues increase more rapidly and there is usually a greater willingness (especially for state governments) to fund upgrading and renewal programs for infrastructure. The converse is true in a downturn, when expenditures must be contained to protect the budget position.

The Federal Government plays a less important role than state Governments, but their policies can still have a big impact on movements in road maintenance. While state Government spending is usually pro-cyclical, Commonwealth Government spending is more counter-cyclical, due to the Commonwealth's role in managing the economy. In periods of economics weakness, the Commonwealth is more likely to lift spending to stimulate the economy, as it did initially with *One Nation* in the early 1990s or the recent *Nation Building* stimulus package.

1.3 Notes on data sources

We use various sources to compile our database of road maintenance activity and general information on the structure and characteristics of the road system. The primary sources of numerical data on road maintenance expenditures were as follows:

- **National Transport Commission (NTC)** — data is sourced from the NTC covering highways and arterials. The NTC collects expenditure data from the state and territory road authorities. This allows for greater insight and comparability (which would not be possible by gathering this data from the annual reports of each road authority).

- **Australia Bureau of Statistics (ABS)**, Local Government Finance Statistics (LGFS) — data on local government roads was sourced mainly from the LGFS collection. The ABS provides data on expenditure by local councils in the 'Road Maintenance' expenditure category. These data have some problems though and some doubt as to their accuracy.

- **Bureau of Transport and Regional Economics (BTRE)** — historical data (to 1986/87) was obtained from 'Australian Road Financing Statistics' publications. More recent data from the BTRE was sourced from 'Transport and Communications Indicators' bulletins and 'Information Sheet 13 — Public Road-related Expenditure and Revenue in Australia 1999'. The BTRE publication 'Working Paper 44 — Spending on Local Roads' was useful in reconciling some of the inaccuracies and problems in the ABS LGFS data.

- **BIS Shrapnel survey data** — we have surveyed road authorities, local governments and private toll road operators, as well as analysing budget papers, annual reports and other planning documents. The survey provided both quantitative information and qualitative information (regarding attitudes to contracting-out, expected future trends, key issues etc).

We also referred to other publications and sources to a lesser degree. Amongst these were:

- Australian Local Government Association (ALGA) — which has published reports based on surveys of members and also provides a snapshot of councils' expenditures on its website.
- Bureau of Infrastructure, Transport and Regional Economics (BITRE): Australian Infrastructure Statistics Yearbook 2011 has much information on Australia's road network.

The definitions of each of the categories of road maintenance, and the *primary* source of information used in compiling the historical estimates, are provided in the table below.

Road Category	Definition	Primary Data Sources
National Network of Roads	The National Network is comprised of national and interregional transport corridors (including connections through urban areas), links to ports and airports and other inter-modal connections. Together, these roads are of critical importance to national and regional economic growth, development and connectivity. The National Network took over from the separate National Highways System, Roads of National Importance and the interstate rail network on July 1 2004 and is funded by both Commonwealth and State Governments. The National Network includes roads in urban *and* rural areas. As a result, National Network maintenance (via funding from State and Federal Governments) will be covered in urban and rural highways and arterials.	NTC BTRE State Road Authorities
Other Highways and Arterial Roads	The bulk of highways and arterials maintenance occurs on these roads. These include the principal traffic routes in metropolitan areas, links between cities and towns and roads which carry commercial and private traffic volumes.	NTC BTRE State Road Authorities
Local Roads	Roads servicing local traffic, including residential streets, roads in commercial or industrial areas with low traffic volumes, roads servicing rural properties.	LGFS BTRE
Private Toll Roads	Arterial-type roads, the construction of which is financed by the private sector, on which a toll is charged.	BIS Shrapnel estimates

Key to Data Sources:

BTRE: Bureau of Transport and Regional Economics, Australian Road Financing Statistics, Indicators bulletins, and Information Sheets 9, 11 and 13.

NTC: National Transport Commission, Annual Reports and Expenditure Profile Data

LGFS: Unpublished data from the ABS Local Government Finance Statistics series.

State Road Authorities: Annual reports, unpublished data, survey responses.

1.4 Overview of Australia's road maintenance sector

Road maintenance is one of the largest maintenance sectors in Australia. The total value of maintenance work undertaken in 2009/10 was $5.67 billion (in current prices). Of this, we believe $2.13 billion of work (37.5 per cent) was undertaken by private contractors.

Road maintenance has grown consistently over the medium term, averaging 2.5 per cent per annum growth (in real terms) between 1974/75 and 2009/10. Between the mid 1970s and 2002/03, road maintenance was between 52 and 70 per cent of road construction in a given year. Since then, oscillating maintenance and soaring construction saw this proportion fall to an historical low of 35 per cent in 2008/09, although has since recovered slightly. This appendix is an overview of the road maintenance sector: descriptive information of the road system, types of maintenance, maintenance contractual arrangements, and a summary of past trends in road maintenance.

1.5 Types of roads and road maintenance

The largest road maintenance purchasers are the state road authorities. The value of road maintenance for local governments is broadly similar to the state road authority work. Local road maintenance is generally the largest category, but strong recent growth in highways and arterials maintenance work (via state and national funding programs) and various financial issues for Local Governments has reversed this trend. Local roads still make up the bulk of the network, but these roads are not as heavily trafficked and the value of maintenance per kilometre on them is much less. The make-up of the road maintenance sector is shown below.

Table 1.1: Australia's Road System (with maintenance in current prices)

Type of road	Length km	Lane Length km	Travel million vehicle km	Maintenance Activity 2009/10 - $m	No. of Purchasers
Highways and Arterials	**140,266**	**330,118**	**169,209**	**2,962**	**8**
Rural	122,498	273,689	82,165	1,890	8
Urban	17,769	56,429	87,044	1,072	8
Local Roads	**676,691**	**1,358,229**	**48,587**	**2,639**	**563**
Rural	578,077	1,151,450	16,243	1,309	427
Urban	98,614	206,778	32,344	1,330	136
Private Toll Roads	**132**	**723**	**2,674**	**69**	**3**
All Roads	817,089	1,689,069	220,470	5,670	574

Length & Lane Length:2009, Travel:2008/09 Sources: BITRE, BIS Shrapnel

Highways and Arterials are a network of major roads: links between capital cities and key urban and rural corridors. Although not the largest system, these roads receive much traffic and require substantial maintenance. These include the former National Highway System (NHS) (now part of the National Network). While the Federal Government had complete responsibility for the NHS, the National Network is under the care of state and Federal Governments.

The Federal contribution to National Network maintenance was capped to just $300 million under AusLink 1, (save natural disaster funds and the stimulus) which saw the states' contribution increase in importance. We believe the Federal contribution moved towards $400 million in the last two years but has since surged as flood repairs are undertaken in many states. Once this is complete, funding will fall back towards levels seen in the early 2000s in real terms: hence the states' contribution will rise. The states' traditional reluctance to invest until revenues recover after a demand shock will see National Network maintenance come under increasing pressure.

The most highly trafficked roads deteriorate more quickly and are required to be maintained at a higher standard. This accounts for the relatively high level of maintenance on highways and arterials. Urban local roads are generally constructed to a much higher standard than is justified by the level of traffic, but they do not deteriorate very much over time. Despite the low traffic volumes on rural highways and arterials, their sheer size ensures maintenance expenditure exceeds their urban counterparts. As well as the usual deteriorating effects of traffic, there are numerous problems on rural roads (which are largely unsealed), including salinity and erosion. Over 43 per cent of Australia's road length is sealed.

Local government roads account for the vast majority of the network but carry only a small proportion of traffic. The value of local government road maintenance is low as a proportion of road length because of the lower traffic burden, the generally lower design standard of road (especially in rural areas) but also due to the struggling predicament of local Councils. While local roads represent 80 per cent of the road network (in total lane kilometres), they received just 47 per cent of road maintenance activity in 2009/10 due to their relatively low traffic levels, although this is still comfortably the largest sector.

Private toll roads currently account for 1.2 per cent of total road maintenance expenditures. However, these roads experience high traffic volumes and are maintained to high quality standards, thus making these roads the most expensive to maintain per lane kilometre.

More detailed notes, analysis and discussion for each of these categories is in Chapter 2.

Types of maintenance

In this report, we identify five basic types of maintenance and four broad road categories. The value of maintenance in 2009/10 by these cross-classifications is presented in Table 1.2.

Table 1.2: Australia
Value of Road Maintenance Activity, 2009/10, Current Prices, $ Million

	Highways and Arterials			Local Roads	Private Toll Roads	Total
	Rural	Urban	Total			
Pavement & Shoulder Maintenance:						
- Routine Maintenance	427.9	94.5	522.5	670.5	18.1	1211.1
- Periodic Maintenance	323.6	126.5	450.1	534.7	12.0	996.8
- Rehabilitation	503.5	211.8	715.3	639.0	13.7	1368.0
Bridge Maintenance & Rehabilitation	130.5	97.5	228.0	229.9	2.0	460.0
Other Non-Pavement Items	504.3	542.1	1046.4	564.9	22.8	1634.2
Total	1889.8	1072.5	2962.3	2639.1	68.6	5670.0

The five types of maintenance (based on the standard NTC categories):

- *Routine maintenance* — regular maintenance of roads and shoulders, including pothole repairs, crack seals and edge repairs.
- *Periodic maintenance* — costs incurred more than once a year, such as reseals & overlays.
- *Rehabilitation* — restoring failed pavement to original design standards, including large patching and re-construction (NB: work **improving** original standards is **not** maintenance).
- *Bridge Maintenance and Rehabilitation* — including painting, replacement of railings and decking and culvert maintenance.
- *Other Non-Pavement items* — maintenance of street lighting, traffic signals, drains, roadside and medians, roadside furniture etc.

Australia's road network is ageing; many corridors were built quite quickly using lower design standards than today. This necessitated strong growth in capital-intensive rehabilitation (at the expense of routine work) in the 1990s. It was the main type of activity from 1992/93 to 2000/01.

Since then, insufficient Federal funding, strong costs growth and road maintenance's low priority in many states saw funding fall for highways and arterials. This turned around since 2007/08, but rehabilitation stayed weak until a spike in 2008/09. Most of this was rural; heavily trafficked urban roads largely missed out. Meanwhile, local councils suffer from insufficient revenues (too reliant on rates), an aging stock of assets and cost-shifting (where Governments pass on duty of care for assets), making it most unlikely they could ramp up rehabilitation.

In order to maintain as much of the network as possible in spite of changing priorities, there was a definite shift from rehabilitation to non-pavement maintenance from the late 1990s. This was seen in almost all states, except Western Australia (although their Auditor General believes not nearly enough work was done in the last decade) and Queensland (where the proportion remained robust but not at mid 1990s highs). Rehabilitation has spiked at some point in the last three years in most states, but has (or is about to) fall back to weak levels.

After averaging 29 per cent from 1992/93 to 1999/2000, rehabilitation's proportion fell to a sixteen-year low of 21.8 per cent in 2007/08 but rebounded to a nine-year high of 26.3 per cent in 2008/09. Non-pavement maintenance averaged 21 per cent in the 1990s, but has been at 27-28 per cent in recent years. As the flood rebuild takes place, rehabilitation will rise, at the expense of non-pavement work, before the end of flood works will see these trends reverse and the rehabilitation backlog increases again.

1.6 Nature of road maintenance arrangements

Arrangements for road maintenance matured in the 1990s, resulting in a dramatic increase in outsourcing. But the pace of development has slowed since then, given the generally stable political environment and the lack of a new trigger (such as a shock to revenues) in those states with low levels of contracting-out. In general, road maintenance delivery can be summarised thusly, organised to reflect increasing levels of sophistication.

Day Labour	➔	Schedule-of-Rates *Short to medium term*	➔	Lump sum, performance based/Alliance Longer term	➔	Design, Construct, Maintain Long term	➔	BOOT *Very long term concession period*

The practices of different Governments are the reason for the differences in arrangements, rather than any intrinsic characteristics of the different types of roads or maintenance tasks:

- The Federal Government has a minimum level of competitive tendering for its maintenance. This meant a higher contract percentage on the NHS and now on the National Network.
- Despite this directive, there are major differences between the practices of the states. Some states (Victoria, Western Australia, Tasmania and Northern Territory) completely contract out most state-controlled works, while the largest states (New South Wales and Queensland) still do most of their work in-house.
- Finally, local governments outsource the least. The use of locally based workforces is considered important to provide employment for their communities. We previously believed rising unemployment due to the economic downturn would push local outsourcing rates down, but with unemployment not rising much, councils in difficult financial situations and more skills shortages to come, we believe total outsourcing will increase. However, a limiting factor may be some councils feeling that their small size stops them from obtaining maximum savings from contracting-out.

While contracting differs between various Governments, there are also important differences between various maintenance types and this affects the degree of contracting-out. Generally, more complicated and expensive tasks (such as rehabilitation) are likely to be contracted out as one-off projects. Routine and periodic tasks are usually done under day labour arrangements.

Table 1.3: Australia
Value of Contract Road Maintenance by type of Contract, 2009/10, $ Million

	Road Authorities	%	Local Government	%	BOOT Schemes	%	Total	%
Single Project/Quote	122	*10%*	250	*30%*	0	*0%*	371	*17%*
Schedule-of-Rates (SOR)	314	*26%*	416	*50%*	0	*0%*	730	*34%*
Lump Sum, Performance Based(*)	489	*40%*	87	*10%*	69	*100%*	644	*30%*
Combination Lump-Sum/SOR	251	*20%*	76	*9%*	0	*0%*	327	*15%*
Design, Construct, Maintain	54	*4%*	0	*0%*	0	*0%*	54	*3%*
Total	1229	*100%*	829	*100%*	69	*100%*	2,127	*100%*

(*) Includes Alliance contracts

Table 1.3 shows our estimate of outsourcing by contract type: schedule-of-rates and lump sum performance based contracts are most common. Schedule-of-rates contracts are seen mostly in Queensland, Victoria and the Northern Territory, with local councils in most states choosing this option.

Lump sum performance based (alliance) contracts are prevalent in Western Australia (particularly with the new ISA framework), Victoria and (partly) in New South Wales (where there is one major lump-sum contract, North-East Sydney). Almost all work in South Australia and in Tasmania is done by combination lump-sum/schedule-of-rates contracts. Design, Construct and Maintain (DCM) contracts provide only a small percentage of contract work, with New South Wales in particularly abandoning the framework due to its lack of flexibility and inability to deal adequately with rising costs.

The politicisation of road maintenance arrangements has fallen away in recent years. Despite Labor having dominated state politics for much of the 2000s, there has been no reversal of contracting arrangements — because of their long term nature and their success in achieving cost efficiencies (such as in Victoria). Growth in contracting out slowed in the 2000s, such that the level of outsourcing in 2009/10 reached 37.5 per cent.

Table 1.4: Value of Road Maintenance Activity
Australia, States and Territories, 2009/10, $ Million

	Total Maintenance	Contract Maintenance	Contract %
NSW	1454.2	288.1	20%
VIC	1080.5	810.4	75%
QLD	1887.7	250.7	13%
SA	280.8	98.2	35%
WA	673.2	450.7	67%
TAS	137.6	85.1	62%
NT	121.8	114.5	94%
ACT	34.2	28.8	84%
AUST	5670.0	2126.5	38%

1.7 Drivers of road maintenance and past trends

Road maintenance experienced steady growth in the 1980s and 1990s after the restraint of the 1970s, yet was subject to cyclical fluctuations. However, the broad trend is up: from 1980/81 to 2009/10, road maintenance grew at an average rate of 2.8 per cent, despite weakness in the 2000s.

Strong growth in the mid 1990s and into the late 1990s, peaking in 1999/2000

After the 1991 recession, activity jumped by 23 per cent in 1992/93 and by 12 per cent in the two years to 1995/96. This was due to the *One Nation* package (a Federal Government response to the recession), but also to state programs (the Better Roads levy in Victoria, Transform Western Australia and the Infrastructure Rejuvenation Program in Queensland).

The mid 1990s was a very strong period for rehabilitation maintenance (especially on the former NHS, where work peaked in 1995/96). Prior under-funding of major highways and arterials was remedied in a concerted upgrading program. Another lift in activity took place over 1998/99 and 1999/2000, with a cumulative increase of 25 per cent. The largest increases occurred in New South Wales (with various Olympics upgrades) and in Queensland (where local rehabilitation maintenance jumped 40 per cent).

Downturn and persistent weakness saw activity fall to nine-year low in 2006/07

After peaking in 1999/2000, activity fell 13 per cent to 2006/07. The main drivers here were:

- A return to more ‘normal’ road maintenance levels following the burst of works programmed in the late 1990s. In other words, these post-2000 falls came from a high base.
- The ongoing decline in Federal funding of the former NHS. Despite falling 30 per cent from 1995/96 to 1999/2000, activity continued to fall to 2004/05 (almost a quarter). The weakness continued under AusLink (where baseline funding was capped at $300 million per year until 2008/09). This insufficient funding was increasingly eroded by strong costs growth. While Federal funding is only a small part of rural highways and arterials activity, this weakness helped contribute to the fall in this area of 23 per cent from 1999/2000 to 2006/07.
- Stronger growth in costs of road maintenance. According to the BITRE’s Road Construction and Maintenance Index, costs rose 33 per cent from 1999/2000 to 2006/07 (cf. 14 per cent in the 7 years to 1999/2000). This figure was possibly far stronger in some regional areas.
- Costs growth was a major reason behind falling local road maintenance. Local councils are ill equipped to deal with large jumps in costs of maintaining aging infrastructure, due to their too-narrow revenue base and mistreatment from higher Government (cost-shifting). Hence, local maintenance declined the most of any category (23 per cent) in the seven years to 2006/07.
- Costs growth was also pivotal in major rural road maintenance. As increasing costs ate into already inadequate maintenance funds, Governments could not maintain all major roads sufficiently. They largely chose the more heavily travelled urban roads (major urban roads maintenance leapt 71 per cent from 1999/2000 to 2006/07) instead of major rural roads.
- The low priority for road maintenance by Federal and state Governments. This starts with the Feds, who allocate billions more to construction over maintenance. But state Governments are not good either; they let maintenance slip and backlogs develop, mostly on rural and local roads, but urban roads suffered with rehabilitation since 1999/2000.

Overdue rebound carried into 2009/10, but problems remain

After seven years of weakness, road maintenance finally bounced back in 2007/08 (11 per cent), led by those areas which suffered the most since 1999/2000: rural highways and arterials (10 per cent rebound), local roads (17 per cent) and New South Wales (21 per cent). The need for activity to increase again had become quite urgent; this was illustrated by such a rebound while costs growth was still very strong (almost 7 per cent according to the BITRE).

With that said, road maintenance strengthened in all states in 2007/08. This was largely due to an increasingly urgent need for work by local councils and major state programs of infrastructure investment (which also benefited local and National roads via grants and 'top-ups' to Fed funding respectively).

Other drivers of maintenance in the remaining states/territories in 2007/08 were the increasing need for greater levels of work (quite high backlogs, especially of rehabilitation), but also a greater amount of work due to natural disaster repairs (especially in Queensland and the Northern Territory).

The rebound of 2007/08 continued into 2008/09 and 2009/10. Supported by much lower costs growth, resulting from the GFC-induced slowdown, other drivers of activity included the continuation of state investment programs, the introduction of the Federal stimulus, and more natural disaster repairs on highways and arterials. Local roads, however, have been weaker as councils nationwide suffer from funding pressures, although the majority of this fall can be attributed to New South Wales.

While this overall rebound has been significant, BIS Shrapnel believes it hasn't involved a fundamental change in attitudes for this long-neglected area. In particular, the rebound has seen maintenance still have a fairly low priority with state and Federal Governments and has involved no new major initiatives for funding sustained growth in maintenance (and attacking backlogs).

On the state side, any boost for maintenance on one type of road (rural or urban) seems unable to be undertaken without diverting funding from the other, while Federally, the baseline level of funding is still far too low and has only been boosted by the Stimulus and natural disaster repairs. Meanwhile, state and Federal assistance towards Local Government is generally insufficient; Councils are largely unable to mount a significant initiative towards attacking backlogs in road maintenance and difficulties in securing sufficient revenue growth.

In short, we believe the current foundations of the rebound in maintenance are unsteady at best. We do not see a sustained recovery in maintenance until Governments move maintenance up their priority list. This will be increasingly important as population and traffic are expected to continue to grow strongly and roads continue to age. Our forecasts suggest the start of another upswing in maintenance (with rehabilitation work prominent) from the middle of the decade. This is expected to gather strong momentum in the decade to 2025/26.

BIS Shrapnel
BUSINESS RESEARCH AND FORECASTING

Road Maintenance in Australia 2011 – 2026
Subscription Form

INFRASTRUCTURE AND MINING

	Subscription
Roads Package 1 (includes all 3 volumes and overview document) ______ extra copies at $550 each	❑ $22,440
Roads Package 2 (includes Construction, Maintenance and Overview) ______ extra copies at $550 each	❑ $17,820
Individual Copies	
Road Construction in Australia & Road Maintenance in Australia	❑ $9,900 each
Road & Bridge Construction Cost Quarterly (4 quarterly reports)	❑ $6,380
Half Day Workshop	❑ $12,100*
(for subscribers)	❑ $8,800

*Plus travel expenses from Sydney

Total: ___________

All prices quoted are inclusive of GST.

Mr/Mrs/Ms: ____

Title: ____

Company: ____

Street address: (for courier) ____

Postal address: ________________________________ Postcode: __________

Phone: (0) ____________________ Fax: (0) ____________________

Email: ____

❑ A cheque is enclosed. ❑ Please invoice me for payment. ❑ Charge my Visa/Mastercard

Card number ______________________________ Amount $ ______________

Cardholder's name ______________________________ Expiry date ______________

I confirm that these reports are for the internal use of my organisation and its branches or subsidiaries only, and will not be made available or copied for the benefit of other organisations. My company and I are aware of copyright obligations.

Signature: ________________________________ Date: ______________

Please fax to:
BIS Shrapnel Pty Ltd
F: (02) 9959 5795
T: (02) 8458 4200
www.bis.com.au

or post to:
BIS Shrapnel Pty Ltd
Level 8, 99 Walker Street
North Sydney NSW 2060
AUSTRALIA

For further enquiries please contact:
Adrian Hart **(ahart@bis.com.au)** at our Sydney office.