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Decoding the road provision message in accrual accounting reporting

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Abstract
Accrual accounting was introduced into the government sector of the national economy in order to overcome what was seen as an inability of the various levels of government to provide real accountability on financial performance.

Of specific interest here is how this was applied to road expenditure in the national accounts and in the annual reports of statutory authorities responsible for the provision of roads at the state level of government. The reason why it is necessary to take this perspective is that when it comes to the provision of roads in Australia the financial measures and provisions of the various levels of government are interwoven. This means that in terms of policy analysis the signals produced by these interactions need new techniques for their decoding. The impact which the current federal state financial arrangements have on accountability for road expenditure, is that while there is increased responsibility at the state level to account for road expenditure, the capacity to put it in a national perspective, requires refinement of the tools required for that purpose.

This paper discusses the inputs which go to make up the road expenditure figures used in the National Accounts and examines whether they can be decoded for the purpose of producing figures which are comparable and useful for policy analysis.

The views expressed in this paper are those of the author and do not necessarily represent those of the Bureau of Transport and Regional Economics. The usual caveats apply.

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GO BACK TO START SCREEN GO BACK TO INDEX

Introduction

Working out the amount of money spent on road expenditure in Australia is an exercise in Public Finance accounting. This paper is an attempt to simplify this accounting as it concerns road expenditure. It discusses the inputs which go to make up the road expenditure figures used in the National Accounts and examines whether they can be decoded for the purpose of producing figures which are comparable and useful for policy analysis.

This paper looks at two ways to derive road expenditure from accrual accounts. The first method is to look at the accounts of state level Statutory Authorities. Examples of how road expenditure figures may be estimated are presented by examining the Annual Reports of road construction authorities.

The second method looks at how road expenditure data is estimated from government finance statistics (GFS) data as provided by the Australian Bureau of Statistics (2002) together with an example.

The results of the two approaches are compared and then the lessons learnt are discussed.

Background

Accrual accounting was introduced into the government sector of the national economy in order to overcome what was seen as an inability of the various levels of government to provide real accountability on financial performance.

The purpose of adopting these international accounting standards in the Australian System of National Accounts is to provide; " a comprehensive framework for the compilation of economic data in a format designed to facilitate macro-economic analysis, decision taking and policy making" Australian Bureau of Statistics (2000a p.6). As noted by the National Commission of Audit (1996), the adoption of world wide system of National Accounts by the Australian Bureau of Statistics follows the United Nations' *System of National Accounts,* United Nations (1993) and the International Monetary Fund's , *A Manual Of Government Statistics,* International Monetary Fund (2001). Both of these publications provide detailed guidance on the various financial classifications which should be used to make up a nation's accounts.

Of specific interest to this paper is how this was applied in the national accounts and by state statutory authorities. Until the adoption of accrual accounting by State owned organisations their accounts reported road expenditure under the headings of current expenditure and capital expenditure. This was the accepted way of reporting cash transactions by government organisations. Road expenditure figures derived from these accounts were reported as expenditure outlays and as noted in Australian Accounting Research Foundation (1998), was meant to provide the public with a picture of the work which governments did in providing road infrastructure in a particular year and over time .

This expenditure resulted in the accumulation or expansion of the road asset either qualitatively or quantitatively over time. The road infrastructure was either increased in length or expanded in capacity. The asset created was a capital asset. The measurement of this asset however created some problems. Historical costing of the asset, that is to say adding up the expenditure in the asset over time gave no real picture of the current usefulness of the asset. The asset may have had a very large historical value yet be in a high state of deterioration. The use of measures of depreciation also can distort the picture of the true usefulness of the road infrastructure. The cost of using the infrastructure may be increasing on account of its true state while it was apparently an asset of great value.

Accrual accounting as it is applied to state road authority annual reporting

The general format of accrual based accounting is to have three accounts. These are the Operating Statement or Statement of Financial Performance, the Statement of Financial Position, and a Statement of Cash Flows. The Australian Accounting Standards for government entities are set out in Australian Accounting Research Foundation (1998).

The Operating Statement reports on Revenue and what are usually called Expenses. A feature of accrual accounts is that under Expenses is included Depreciation. Expenses are in fact operating expenses, which are similar to what is called current expenditure. A major component of this is the cost of labour including superannuation and redundancy payments. Revenue includes Grants from outside bodies for example government.

The Statement of Financial Position provides information about assets controlled and liabilities incurred. This provides a picture to the public of the entities future capacity to provide goods and services. The Statement of Cash Flows provides a picture of the sources of receipts and how that money is spent during the year. Assets purchased during the year are in fact capital assets acquired or produced. This account therefore includes what under cash accounting is the capital account.

The difficulty presented in looking for road expenditure with accrual accounts is to identify and extract, the current and capital components or the expenses associated with maintaining the road asset and the amount of expenditure which is capitalised in creating new road assets.

Capital and operating expenditure

In order to distinguish between capital expenditure and operating or more specifically in this case maintenance expenditure, it is necessary to be clear about what expenditure is being used for, when applied to infrastructure assets, in this case road and associated works. Thus one definition of maintenance expenditure is that it is the expenditure, which does not increase the capacity or the quality of a road. For example filling in pot holes in road does not increase

its capacity or quality. What happens is that the road surface is returned to its previous state. Widening a road or improving the quality of its surface for example by sealing it with bitumen is clearly by this definition a capital expenditure because it increases its economic life and the quality of the service it provides.

Depreciation

The depreciation of an asset can occur only after installation has been completed. What is depreciated is the wear and tear of the tangible asset which maintenance in unable to restore. That is to say the original capital investment in the road. The most common means of assessing the life of an asset is time as described in Australian Accounting Standards Board (1999) and Australian Accounting Research Foundation (1997).

According to these standards the straight line method is most popular for depreciating assets because of its simplicity. It is an appropriate method where the wear on the asset is constant from year to year. The reducing balance method is used where the wear or the use is greater in the earlier years. It is less appropriate for roads. Choice of a method should be determined by the use made of the asset and irrespective of other financial considerations

It should also be remembered that a non-current asset may be divided into parts which are given different lives. For example additional investment in the asset which increases the time between maintenance may be depreciated over the life of the saving in maintenance, for example making a bitumen road seal thicker than usual.

Another important factor associated with depreciable assets is revaluation. This may occur when the historical cost approach is departed from and the asset is revalued upwards. This is generally on account of inflation. This amount is allocated over the useful life of the asset.

It is also necessary to review the factors which underly depreciation estimation annually as some of those factors may change over time. For example road works may have their useful lives reduced by flood damage.

The national accounts and the impact of accrual accounting

Road expenditure by government is included in the National Accounts as Final Consumption Expenditure by general government, Australian Bureau of Statistics (2000b). It is included as part of the economy as government expenditure on collective consumption services, specifically as non-market services to enterprises. While some of this consumption could be monitored, the difficulty of separation means that expenditure is treated as collective final expenditure. The category is that of the Australian and New Zealand Standard Industrial Classification, Australian Bureau of Statistics (1993). It is a part of

Division E Construction, Subdivision 41, General Construction, Group 412, Non-building construction, class 4121 Road and Bridge Construction.

This class is made up of units engaged in construction and repair of roads, bridges, airport runways and parking lots. It includes the quarrying of the materials used for these purposes. Specialised trade services are not included here but are placed in subdivision 42, Construction Trade Services.

The general government expenditure which feeds into the National Accounts comes via the collection of Government Financial Statistics, Australian Bureau of Statistics (2001). Road Transport , of which road construction and maintenance is a part, is incorporated by ABS under Government Financial Statistics (GFS) coding as Government Purpose Classification (GFC) 321 Road Transport. This reporting framework often takes the same format as all accrual accounts. Under this arrangement total outlays may consist of expenses plus expenditure on new non-financial assets.

This approach has been described as providing; "a wider, more accurate and more comprehensive approach to measurement, enabling better management and accountability" Bartos (2000). The purpose is to move from the cash accounting approach "of monitoring inputs and tracking actual outcomes to focusing on the outputs associated with achieving the Governments planned outcomes" Bartos (2000).

Accrual accounting as applied by statutory bodies and government departments in their reporting of road expenditure two examples

Each state road provider presents it's road expenditure differently, however, dealing with each one would be a paper in its own right. The approach taken in this section of the paper has therefore been to narrow the area of research.

This section deals with two examples of the different forms in which road expenditure is presented from state sources. These examples are taken from the Annual Reports of the Roads and Traffic Authority of NSW and the Victorian Roads Corporation. The differences in presentation and the estimates of total road expenditure are shown in order to provide data for the later discussion and comparison with estimates drawn from ABS GFS statistics.

Road expenditure outlays are defined for the purposes of this section and for consistency with GFS data as the sum of road maintenance and road construction expenditure. In particular the expenditure sought is that by state general government on the roads under its jurisdiction. Generally it is expenditure on highways and arterial roads and supporting infrastructure such as bridges and traffic signals.

New South Wales

Roads in New South Wales are provided by a government statutory body called the Roads and Traffic Authority (RTA). Its accounts must comply with the New South Wales *Public Finance and Audit Act 1993* and with Australian Accounting Standards and with NSW Treasury guidelines for Financial Reporting, NSW Treasury (2002).

The sources for road expenditure data used in this section are the Financial Statements appended to the Annual Reports of the NSW Road Traffic Authority. In order to estimate a figure for road expenditure outlays from these statements it is first necessary to understand the way in which the accounts are structured and the rules and definitions, which govern the selection and presentation of their financial information.

The Financial Statements have an accrual format consisting of a Statement of Financial Performance, A Statement of Financial Position, Statement of Cash Flows and a Program Statement of Expenses and Revenues. The information on road expenditure is contained in the Program Statement as expenditure on the Road Network Infrastructure and as an input to the Statement of Financial Position. These statements and supplementary information provide the figures presented in Table 1 for total outlays on roads.

As presented in the accrual format what were called annual current and capital outlays on the road network infrastructure under cash accounting are approximated as Expenses and as new Non-current Assets respectively. Expenses consist of Operating expenses, Maintenance, Depreciation and Amortisation, Grants and subsidies and Borrowing costs.

Operating expenses consist of Employee related expenses and other expenses. Employee expenses include salaries and wages, superannuation and long service leave. Employee related expenses included in maintenance expenditure are required to be separately identified. Expenses capitalised are reported elsewhere in a fixed asset account called Non-Current Assets-Property, Plant and Equipment. Current road expenses are recorded in the Program Statement as Expenses on the Road Network Infrastructure. Other operating expenses include administrative costs associated with road safety and traffic management. There are also operating expenses associated with the "cashback" scheme for the M4 and M5 tollways.

In order to understand how maintenance expenditure is expensed or capitalised and how assets are capitalised it is necessary to look at the definitions provided by the NSW Treasury guidelines on the capitalisation of expenditure, NSW Treasury (2000). They apply to the financial years on or after 30 June 2000. It is the explicit purpose of these guidelines to define capital and maintenance expenditure for use in the accounts of public sector agencies including statutory authorities such as the RTA. Asset-related expenditure is separated into three categories; Asset expenditure, Routine Maintenance and Major Periodic Maintenance.

Asset expenditure is expenditure, which gives rise to "an effective and material increase" in the future economic benefits to an agency and should be capitalised. In this case the asset should be recognised in the Statement of Financial position and is provided as the written down cost of Infrastructure Systems.

Routine maintenance is maintenance of a regular or ongoing nature and is to be treated as an expense for accounting purposes. That is to say it is a charge in the Statement of Financial Performance of the Agency. An example is the patching of potholes in a road. It does not meet the definition of an asset. It is intended to ensure that the asset continues to provide its pre-determined service capacity, quality and useful life.

Major periodic maintenance however is different. Under the new definition a major maintenance of an asset may be recognised as increasing its originally assessed performance. Where this happens the maintenance is not expensed but is capitalised. There is an example of this approach in Table 1 where a "major enhancement" in 2000-01 of $75 million is capitalised and included as part of non-current assets rather than maintenance. This can occur when it has been estimated that economic benefits in excess of those of the originally assessed standard of performance of the asset will flow in future years. An example is widening a road from two to four carriageways.

The guidelines also refer to depreciation. Agencies must account for separate component assets in order to determine the depreciation expense over the useful life of the assets. Essentially they should follow the guidelines set out in the current accounting standard on depreciation AAS4. According to AAS4 a depreciation expense is "an expense recognised systematically for the purpose of allocating the depreciable amount of a depreciable asset over its useful life" Australian Accounting Research Foundation (1997). It is also worth noting that the RTA changed from condition based to the straight-line depreciation method for infrastructure assets from 1999-00 onwards, hence the increase from $ 114 million to $435 million for depreciation in Table 1.

The amount reported in the Statement of Financial Performance of the RTA ARP 2000-01 of $313 million has a major component $307 million of depreciated Road Network infrastructure.

The capitalisation of new assets is reported under Non Current assets. Roads are reported under the sub-category Infrastructure Systems, which corresponds to the category Road Network Infrastructure used in the Program Statement. These assets include roads, land under roads, bridges, and traffic signals as well as the traffic control network. When the rehabilitation and additions to road assets are summed for 2000-01 they come to $758 million.

The figures presented in Table 1 draw on the information in the RTA Annual Reports to provide a way of estimating total outlays on roads from 1998-99 to 2000-01. As noted some employee related expenses have been expensed to

maintenance and some capitalised. Similarly some depreciation has been capitalised.

The expenditure categories in Table 1 include grants and subsidies to Local Government and other agencies under the Road Safety program. Similarly borrowing costs are included as Finance costs. These expenses are not included in the estimate of outlays.

Taking these factors into account total outlays taken from Table 1 are for 2000-01, maintenance of $388 million plus added non-current assets of $758 million. Total outlays would then be $1146 million. The other totals are $1608 million for 1998-99 and $1273 million for 1999-00.

Table 1 NSW RTA road expenditure outlays 1998-99 to 2000-01

($ million)

Road Network Infrastructure	1998-99	1999-00	2000-01
Operating Expenses			
Employee related	11	6	18
Other operating expenses	39	38	55
Maintenance	606	539	388
Depreciation and amortisation	114	435	307
Grants and subsidies	14	27	13
Finance costs	111	79	86
Expenditure on new non-current assets	1002	734	758
Maintenance	606	539	388
Total outlays	1608	1273	1146

Source RTA (1999, 2000,2001).

VICTORIA

Arterial roads such as freeways and highways in Victoria are provided by a government statutory body called the Victorian Roads Corporation or VicRoads. Arterial roads designated as main roads are managed by Local Government on behalf of VicRoads. VicRoads produces an Annual Report, the Financial Statements, which must comply, with the Victorian *Financial Management Act 1994* and Australian Accounting Standards as well as Treasury guidelines.

VicRoads has four core businesses: Road System Management, Traffic and Road Use Management, Road Safety and Registration and Licensing. These

are reported in the Statement of Financial Performance of the Financial Statements of the VicRoads Annual Report as Expenses from Ordinary Activities. These are the categories used in Table 2. Operating expenses were reported under these categories in the 1999-2000 Annual Report but not in the 2000-2001 Report. The major area of expenditure in 1999-2000 are indicative. They were Road Safety $41 million, Road System Management $513 million, Traffic and Road Use Management $57. million, Registration and Licensing $69 million, and the remainder of $112 million to Program Support, making a total of $710 million. This was revised to $1092 million in the 2000-2001 report and appears in Table 2. as that amount.

Because the VicRoads accounts are required by the *Financial Management ACT 1994* to use the accrual basis of accounting and to follow Australian Accounting Standards, the general form of the Financial Statements in the Annual Reports is similar to that of the RTA.

Capitalisation of assets

According to the Annual Financial Report-Information Manual Victorian Treasury (2002), which lays down the guidelines for financial reporting for all government entities in Victoria, all non-current assets over $1000 are required to be capitalised at the cost of acquisition.

The Statement of Financial Position shows the written down cost of non-current Infrastructure Assets. They consist of Road pavement, earthworks, sound barriers, bridges and traffic signals. This amounted to $14 948 million in 1999-2000 and $15 055 million in 2000-2001. Of this amount, Infrastructure systems, which is the road related assets, made up $14 330 million and $14 410 million in the respective years.

Expenditure on new non-current assets is covered in the Vic Roads report under "Reconciliations". It is called, " reconciliations of the carrying amounts of each class of infrastructure assets at the beginning of the current and previous financial year" VicRoads (2001). New non-current assets are included in the reconciliation process as "acquisitions" and are presented for each category of road expenditure. Total acquisitions in 1999-2000 were $391 million and in 2000-01 were $206 million. Acquisitions include assets acquired from Local Government roads due to realignments etc. This is ongoing as there are always new alignments being constructed.

Depreciation

Depreciation is charged on all assets excluding land and earthworks. The rule is that acquisitions less that $1000 per item are expensed and, those over that amount are capitalised. Fixed assets are depreciated using the straight-line method.

Depreciation is a part of the Infrastructure Assets Reconciliation account already discussed and is used to write down the "carrying amount" of each

infrastructure asset. A full year's depreciation is charged against these assets with the exception of acquisitions, or as they are also called in the RTA accounts, current year additions. The total amount of depreciation also contributes to the depreciation and amortisation amount in the Expenses, which appear in the Statement of Financial Performance. Other amounts include buildings in service and leasehold improvements. The total amount for road related assets was $195 million in 1999-2000 and $214 million in 2000-2001. The amount of depreciation which appears in Table 2 is the for all Vic Road assets which have been depreciated in the corresponding year. As well as infrastructure assets they include buildings, leasehold improvements and fixed assets.

Maintenance

Maintenance expenditure is reported as a part of Expenses for Ordinary Activities. VicRoads does not capitalise maintenance. If there are projects, which are enhancements, they are reported in the Reconciliations section under acquisitions. There is no requirement to report maintenance separately in the expense account. The "model report uses the term "restoration costs" ,Victorian Treasury (2002). This amount of money is expensed across all categories in the account, though most of it is under supplies and services. The main area is contract payments. This was $305 million in 1998-99, $176 million in 1999-2000 and $215 million in 2000-2001. In addition what appears to be Municipal claims for maintenance are covered under expenses. They amounted to $109 million in 1998-99, $94 million in 1999-2000 and $101 million in 2000-2001. This would suggest that for example the total maintenance figure for arterial roads in 2000-01 was approximately $315 million. It is worth noting that the Vic Roads Annual Report says (2002 p.28) that the total cost of "state funded" maintenance on arterial roads was $173 million in 2000-01.

Table 2 VicRoads Road expenditure outlays 1998-99 and 2000-01

($ million)

Expenditure categories	1998-99	1999-00	2000-01
Operating expenses			
Employee benefits	165	188	82
Depreciation and amortisation	196	198	218
Municipal claims and school crossings	113	94	101
Assets given free of charge	10	19	7
Capital asset charge	41	41	46
Supplies and services	411	284	311
Other expenses from other activities	-131	268	51
Total expenditure	805	1092	816
Expenditure on new non-current assets	na	391	206
Maintenance	413	270	315
Total Outlay	na	661	521

Source VicRoads (1999, 2000, 2001)

As discussed above Table 2 presents information on current and capital expenditure. Current expenditure in this case is taken to be expenditure in the current year on the ordinary activities of VicRoads. It consists of expenditure to meet of its road management responsibilities. Road maintenance is included in these expenses as it is an ongoing expense required to maintain the level of road provision. Most of this expenditure is reported under supplies and services and municipal claims. The reason for this is that it is contracted out to the private sector or to local government.

CONCLUSION

This section looked at the possibility of estimating current and capital expenditure on state arterial roads from a selection of statutory road authority's accounts as published in their annual reports. The conclusion is that there is sufficient information in these examples to obtain an approximate figure for total outlays on roads. There are difficulties however, and the main difficulty lies with the estimation of maintenance expenditure. Capital expenditure is more transparent as the expenditure on newly created assets is an important part of the reporting of the estimation of the state of corporate assets as required in the balance sheet. In the overall requirement of financial presentation, knowledge of expenditure on maintenance of the road asset as a sub-set of the total corporate assets, does not necessarily require transparency. This is understandable from the regulatory point of view where corporate performance

is the main concern. From the policy point of view however knowledge of just how much money is being spent on road maintenance is a useful piece of information.

Estimating state government road expenditure from ABS GFS data

An alternative to using the Annual Reports of Road Authorities is to use information provided for the Australian National Accounts from Government Financial Statistics (GFS). The Australian Bureau of Statistics can provide annual road expenditure data from its GFS database. GFS data has undergone basic changes in the way in which it is collated since the adoption of accrual accounting for the Australian National Accounts. As has been already noted, the format which has been adopted is in line with reporting policies adopted by the United Nations and the International Monetary Fund. The specific form which it takes is laid out in the ABS publication GFS Input Classifications Quick Reference October 1998, Australian Bureau of Statistics (1999). More detailed information is contained in the ABS, UN and IMF publications listed in the bibliography.

GFS road expenditure data

The are two forms of accounting which need to be understood in order to estimate road expenditure using GFS data.

The first form is the way in which ABS categorizes road expenditure according to Government Purpose Classification (GPC).

The second is the financial classification framework based on Economic Type Framework (ETF).

Government Purpose Classification

ABS records Road Transport (32) expenditure under five categories. They are:

- (3211) Aboriginal community road transport services
- (3212) Road maintenance
- (3213) Road construction
- (3214) Road rehabilitation and,
- (3219) Road transport (not elsewhere classified) (NEC).

These categories conform with the activities outlined in the Australian Bureau of Statistics (1994). The main output each of these categories covers is covered by their title, however, they also include activities such as

administration, regulation, support operations, departments, bureaux or program units, and research. They do not include road plant purchases.The last category Road Transport NEC includes all those activities not under the previous headings. These include road plant purchases, road safety, vehicle registration, driver licensing, subsidies and grants to public and private enterprises and operators.

Each of these categories contains a large number of entries under the general heading Economic Type Framework (ETF). These entries conform with the accrual accounting framework discussed earlier. Each of these are coded with a Source/Destination Classification (SDC). Thus the source of revenue may be State general government and the destination Households. They conform with the United Nations, System of National Accounts 1993, United Nations (1993). Table 3 provides an example of the road expenditure information which can be obtained from the ABS GFS.

Table 3 lists all of the information which is provided as input on government road expenditure and associated revenue for the National Accounts. The type of activity is given by the GPC code which in this case is 3212 Road Maintenance and 3214 Road Construction. The SDC code tells us the nature of the institution, for example, non public sector, Commonwealth general government, local general government or non public sector. ETF provides information from the Operating Statement and the Cash Flow Statement.

Table 3 GFS information of road maintenance and expenditure for ETF New South Wales General Government 2000-01

GPC	SDC	SDC Description	Activity	ETF	ETF Sub Group Class	Year 2000-01 $ (mill)
				Road Maintenance		
3212	900	Non public sector		1120	Sales of goods and services	-32
3212	000	Uncoded		1231	Depreciation of fixed assets	3
3212	130	C/W General govt.		1244	Tax expenses	
3212	331	Local General Govt.	Contract with LGG	1229	Other non-employee expenses	235
3212	331	Local General Govt.	Transfer to LGG	1241	Current Grant expenses	118
3212	900	Non public sector	Contractor	1213	Wages salaries and supplements	0
3212	900	Non public sector	Contractor	1219	Other employee expenses	3
3212	900	Non public sector	Contractor	1229	Other non-employee expenses	122

Table 3 (contd.) GFS information of road maintenance and expenditurefor ETF New South Wales General Government 2000-01

GPC	SDC	SDC Description	Activity	ETF	ETF Sub Group Class	2000-01 $ (mill)
3212	900	Non public sector	Acquisition of fixed assets from contractor	2221	Purchases of new non-financial assets	232
3212	900	Non public sector		2223	Sales of non-financial assets	-33
				Road Construction		
3214	900	Non public sector		1120	Sales of goods and services	-58
3214	900	Non public sector	Contractors	1229	Other non-employee expenses	6
3214	900	Non public sector		1242	Subsidy expenses	33
3214	900	Non public sector	Acquisition of fixed assets	2221	Purchases of new non-financial assets	855

Source ABS (2002)

Estimation of expenditure

Availability of GFS data provides the opportunity to make estimates of road expenditure from a complete data source. It has been already discussed how estimates of expenditure can be made form examining the Financial Statements appended to the Annual Reports presented by State Road Authorities.

As already presented in Table 3, under the Economic Type Category (ETF) ,the group, subgroup and class of classification needs to be examined in order to extract those types of expenditure which go to make up an estimation of road expenditure. Thus it is necessary to decide exactly what classification of expenditure should be chosen.

Earlier in discussing the basic features of accrual accounting, it was suggested that in order to obtain a total road expenditure figure, what was need were estimates of current and capital expenditure. Under the accrual system there is no exact equivalent of these types of expenditure. The closest equivalent is operating expenditure on maintenance and capitalised non-current assets.

Depreciation can be added or reported separately depending upon the use being made of the outlay figure. The only other factor which is different is the time frame which is not the same as one applied to cash outlays because of the accrual rule which counts expenditure committed to rather than actually paid over the period. This rule is useful as it tracks program expenditure on the basis of policy decisions.

Returning therefore to Table 3 and examining the ETF subgroup classes, the classes which are reported there, which can be selected to make up a total figure for operating expenses are (1229) other non-employee expenses, (1213) wages salaries and supplements (non-capitalised), and (1219) other employee expenses. Expenditure on new non-current assets is provided by (2221) purchases of new non-financial assets. Depreciation is reported as (1231) depreciation of fixed assets (non-defence). Maintenance expenditure is obtained from (3212) Road Maintenance and Capitalised non-current assets by summing purchases of new non-financial assets under Maintenance and Construction. As noted earlier some maintenance is capitalised.

Table 4 Comparison of RTA and VicRoads with ABS GFS road expenditure figures for 2000-01

($ million)

Expenditure categories	VicRoads	ABS	RTA	ABS
Operating Expenses				
Employee related	82	105	18	0
Other operating expenses	0	401	55	6
Maintenance	315	71	388	360
Depreciation and amortisation	218	123	307	313
Grants and subsidies	7	1	13	33
Finance costs	46	0	86	0
Other expenses	148	0	0	0
Total expenses	816	701	867	712
Maintenance	315	71	388	360
Expenditure on new non-financial assets	206	306	758	1087
Total outlays	521	377	1146	1447

Source ABS (2002), RTA (2000)

Table 4 compares the estimates of road expenditure derived earlier from the RTA and VicRoads Financial Statements with those derived from ABS GFS data. The expenses of the two authorities are not directly comparable as the RTA expenses are actual road program expenses while the VicRoads expenses are the total expenses for the authority. This does not matter as what is being compared are the maintenance expenses and the expenditure on new non financial assets. What is new in this table are the estimates of expenditure taken from ABS GFS data.

The first thing which is apparent with this table is that while the RTA figures bear some comparison with the ABS figures for state general government for NSW, the differences for Victoria are considerable. It is therefore Victoria which becomes a test of the comparability of the data. The question however is which source of data, if either, is reliable.

Table 4 shows maintenance expenditure for VicRoads as $315 million. As noted earlier this is made up from contract expenses and municipal claims expenses. The ABS GFS data however does not show the municipal claims expenditure under State General Government for Victoria. Indeed the contract maintenance figure of $215 million is not derivable from the GFS data. Only $71 million is given in the GFS data. As already noted the Vic Roads Annual Report says that the total cost of "state funded" maintenance on arterial roads

was $173 million in 2000-01. The explanation probably lies in the fact that the VicRoads Accounts spread maintenance across all expenses and that the ABS Maintenance category is incomplete. The rest of the maintenance expenditure is reported under GFS category 3219 Road Transport NEC. In addition GFS does not identify an expense for the purchase of local government services for Victoria. There is also a large difference with new non-current assets. This is probably because the ABS figure includes all fixed and non-current assets. More information is required to reconcile these amounts.

Conclusion

This paper has examined two sources of road expenditure. It has also considered how the categories used in accrual accounting can be used to estimate road expenditure outlays.

It is clear from this investigation that if consistency is required it is potentially represented by the categories used in the GFS. Aggregation of consistent financial data obtained from the Annual Reports of Statutory Authorities is fraught with difficulty.

Neither source however is really transparent as it relies upon a process of consistent selection and classification by those who assemble the data. Decoding this data is still more of an art than a science. The way forward lies in building confidence in a particular source of data and a consistent methodology.

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