Chapter 4 Funding

Introduction

4.1 This chapter addresses the third item in the terms of reference:

> Assess the level of funding required to adequately fulfil the Commonwealth role. This should take into account the current condition of the asset, depreciation and maintenance requirements, as well as new investment required to meet demand growth, changes in technology (especially increased weight limits for heavy vehicles) and community expectations of road standards.

4.2 In 1995–96, the three tiers of government collectively provided some \$6.4 billion for the maintenance and construction of the nation's road infrastructure. In 1995–96, the Commonwealth provided \$1.6 billion, the States/Territories provided \$3.1 billion and local government provided \$1.7 billion (BTCE, 1997).

4.3 The level of tied and untied funding provided by the Commonwealth to the States/Territories and local government for roads was the focus of much of the evidence gathered by the committee during the inquiry. While the committee has considered the level of road funding required generally to fulfil the Commonwealth's role as detailed in chapter 2, it has not closely examined the level of individual State/Territory or local government road funding allocations.

4.4 This chapter considers road funding and delivery mechanisms in terms of the Commonwealth efficiently and effectively fulfilling its role in the provision of road infrastructure and gaining maximum value for the road dollar. Consideration is given to: the appropriateness of existing tied and untied funding arrangements, the question of certainty in funding, and the effects of changing technology on funding requirements. The chapter also includes a discussion on the hypothecation of fuel excise and road user charges.

Commonwealth involvement in road funding

4.5 The Commonwealth has allocated funding to the States/Territories specifically for road construction and maintenance since the 1920s under Section 96 of The Australian Constitution which allows the Commonwealth to allocate funding to any State in line with any terms or conditions it considers appropriate.

4.6 Since the 1920s the Commonwealth has made road funding available to States/Territories and local government over a wide range of road categories and in a number of different forms via tied and untied payments, which have included block grants, matching grants and full funding with detailed Commonwealth involvement.

Figure 4.1 Government funding of road related expenditure 1986-87 to 1996-97

($million)

	86-87	87-88	88-89	89-90	90-91	91-92	92-93	93-94	94-95	95-96	96-97[a]
Commonwealth[b]	1311.4	1251.9	1232.3	1358.0	1595.9	1720.4	2177.0	1552.2	1535.5	1601.7	1623.7
State[c]	1481.3	1473.8	1832.3	2111.1	2557.4	2310.2	2088.4	2440.1	2598.5	3064.3	na
Local[c]	1352.1	1407.9	1427.9	1628.3	1551.3	1569.8	1716.6	1666.6	1710.0	1703.1	na
Total	**4144.8**	**4133.6**	**4492.5**	**5097.4**	**5704.6**	**5600.4**	**5982.0**	**5659.0**	**5844.0**	**6369.1**	**na**

Figure 4.2 BTCE road construction price index 1986-87 to 1996-97

	86-87	87-88	88-89	89-90	90-91	91-92	92-93	93-94	94-95	95-96	96-97
BTCE index	76.4	80.9	86.1	89.5	96.2	97.0	98.8	100.0	102.3[d]	102.9[d]	104.2[d]

Figure 4.3 Indexed government funding of road related expenditure 1986-87 to 1996-97

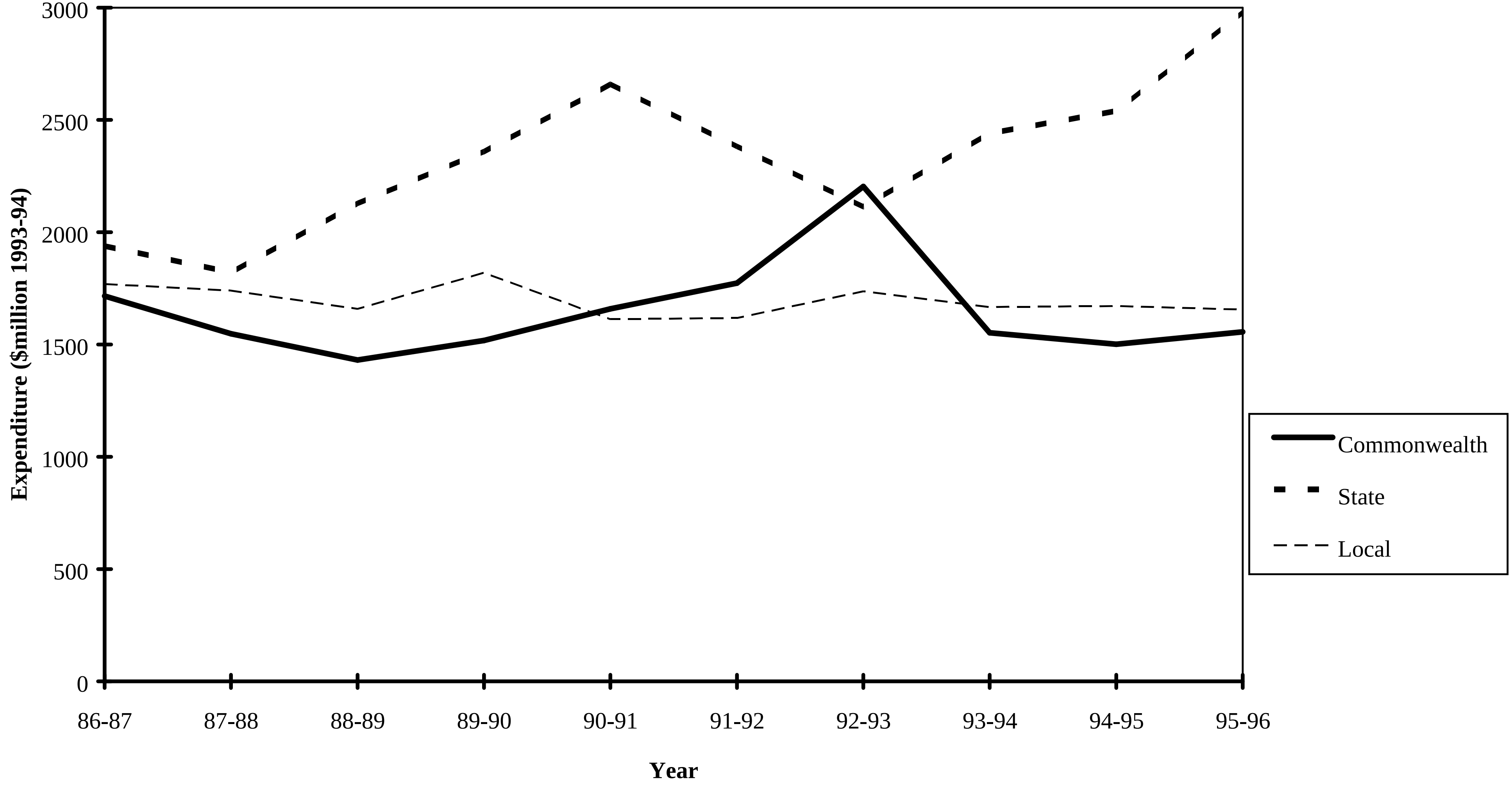
($million 1993-94)

	86-87	87-88	88-89	89-90	90-91	91-92	92-93	93-94	94-95	95-96	96-97[a]
Commonwealth[e]	1716.5	1547.5	1431.2	1517.3	1658.9	1773.6	2203.4	1552.2	1501.0[d]	1556.6[d]	1558.3[d]
State[e]	1938.9	1821.8	2128.1	2358.8	2658.4	2381.6	2113.8	2440.1	2540.1[d]	2977.9[d]	na
Local[e]	1769.8	1740.3	1658.4	1819.3	1612.6	1618.4	1737.4	1666.6	1671.6[d]	1655.1[d]	na
Total[e]	**5425.1**	**5109.5**	**5217.8**	**5695.4**	**5929.9**	**5773.6**	**6054.7**	**5659.0**	**5712.6[d]**	**6189.6[d]**	**na**

Notes
a Commonwealth Budget estimate.
b Figures provided by the Department of Transport and Reigonal Development.
c Figures provided by ABS.
d Preliminary figures.
e These index figures are not strictly comparable pre and post 1993-94 because in preparing the new index, allowance has not been made for changes in the quality of input prices due to the lack of precise information covering the whole period.

Source Bureau of Transport and Communications Economics, 1997; and updated preliminary figures.

Figure 4.4 Indexed government funding of road related expenditure 1986-87 to 1995-96



4.7 The Commonwealth has delivered its road programs since the 1920s via specific road funding legislation with each Act generally lasting between three and five years. Commonwealth road funding legislation prior to the mid 1980s generally referred to a total funding level to be made available over the period of a particular road Act, providing for, effectively, a multi-year road program. Since the introduction of *the Australian Land Transport (Financial Assistance) Act 1985* and subsequent legislation, the Commonwealth road funding has tended to be determined largely on an annual basis (Sub 482, *Submissions* p. 848).

4.8 Figure 4.1 shows government funding of road related expenditure from 1986–87 to 1996–97 by each of the three levels of government. For the same time period, figure 4.2 provides the Bureau of Transport and Communications' road construction price index with 1993–94 as the base year for prices.

4.9 Figure 4.3 shows indexed figures for government funding of road related expenditure relative to the base year of 1993–94. While the indexed data are not strictly comparable over the time, the figures do provide a reasonable indication of trends in funding of road related expenditure by Commonwealth, State/Territory and local governments. Figure 4.4 graphically depicts the trends in government funding for the period 1986–87 to 1995–96. In general terms, the indexed figures show that changes in the Commonwealth's funding of expenditure over the decade have been marginal. Commonwealth expenditure rose sharply in the early 1990s, peaking in 1992–93 at $2203.4 million under the Commonwealth's 'One Nation' initiative which provided a marked increase in funding of road related expenditure in 1991–92 and 1992–93.

4.10 Local government expenditure from 1986–87 to 1995–96 was fairly consistent based on the indexed figures, generally of the order of $1695 million.

4.11 Figure 4.4 shows that the States had the biggest increase in government funding of road related expenditure during the period from 1986–87 to 1995–96, from $1938.9 million in the first year to $2977.9 million in the last year. During the time period there were fluctuations but the overall trend shows a marked increase in expenditure by the States.

Existing Commonwealth road funding mechanisms

4.12 At present, the Commonwealth provides tied and untied funding to the States/Territories and local government for the maintenance and construction of road infrastructure.

Tied funding

4.13 Tied funding (specific purpose payments) is provided under the *Australian Land Transport Development Act 1988* (ALTD Act) and is administered by the Commonwealth Department of Transport and Regional Development. In 1997–98, tied funding totalling $845.3 million is being provided for projects in three categories: the national highway system ($683.6 million), roads of national importance ($112.2 million) and black spots ($36.7 million). (In addition $12.8 million is being provided for research and other purposes.)

4.14 There was general support amongst States/Territories for the retention of tied funding for the national highway system, roads of national importance and black spots, apart from the Victorian Government which considered 'as a matter of principle…all Commonwealth funds to the States should be provided in the form of financial assistance grants, enabling the State to determine the most appropriate means of providing services.' The Victorian Government further noted that 'where this is not practicable, funds should be provided in the form of identified funding grants in the general purpose stream.' (Sub 689, *Submissions* p. 1731)

4.15 The NSW Government noted that 'if Commonwealth funding was to be untied, an agreement between the Commonwealth and the States and Territories would be essential to demonstrate what is trying to be achieved, with an agreed target nationally through strategic plans.' NSW further noted that 'considerable debate would be required to work out equitable, acceptable criteria for allocating payments to the States and Territories.' (Sub 686, *Submissions* p. 1680)

4.16 The Queensland Government preferred the direct tying of funds to roads and rejected the dispersion of funds as financial assistance grants 'as these are in no way related to the road task.' However, Queensland noted that the use of tied funds should be accompanied by simple and effective administration at the Commonwealth level (Sub 643, *Submissions* pp. 1276, 1282). The administrative arrangements associated with tied Commonwealth road funding are discussed in chapter 5.

4.17 The South Australian Government noted that it has no major objections to the use of tied funds for specific road programs provided that those programs deliver desirable outcomes in line with strategic objectives (Sub 423, *Submissions* p. 161).

4.18 The Australian Road Federation supported the use of tied road grants noting that it sees them as 'essential to achieve policy objectives and for the orderly and predictable implementation of roads planning.' (Sub 418, *Submissions* p. 122)

4.19 For the Commonwealth to provide effective national strategic direction in road infrastructure investment, the committee considers that Commonwealth road funding should remain tied in relation to existing and future Commonwealth funding categories. The use of tied funds will ensure that the limited available funding is targeted towards achieving national outcomes. The use of untied grants to fund Commonwealth road programs would reduce the Commonwealth's ability to inject the necessary focus to ensure the development of Australia's roads as a cohesive national system.

4.20 The committee considers that the untying of Commonwealth funding would be inconsistent with, and impede, the Commonwealth's role of providing national strategic direction in road investment.

Untied funding

4.21 Untied funding (general purpose payments) is provided by the Commonwealth to States/Territories and local government as identified road grants. In 1997–98, the Commonwealth is providing $391.0 million for State/Territory roads and $370.4 million is being provided for local roads. Untied road funding, as a part of financial assistance grants (FAGs), is indexed to movements in the consumer price index. 'The indexation of FAGs is guaranteed on a rolling three year basis subject to the States complying with obligations under the Agreement to Implement the National Competition Policy and Related Reforms.' (*Federal Financial Relations 1997–98 Budget Paper No. 3,* p. 23)

4.22 The Commonwealth untied the former national arterial and local road funding categories to assist States/Territories and local government meet their respective responsibilities following the 1990's Special Premiers Conference agreement to delineate road funding responsibilities between the three tiers of government. While this funding is identified as road grants, it is provided by the Commonwealth as part of general revenue assistance and therefore can be used for any purpose commensurate with State/Territory and local government priorities.

Untied road funding to States/Territories

4.23 Untied road funding has been provided to States/Territories since January 1994. From January 1994 to 1996–97, the untied funding allocations of individual States/Territories were determined on the basis of a combination of former State/Territory national arterial allocation levels and per capita relativities determined by the Commonwealth Grants Commission. From 1997–98, individual State/Territory untied road funding allocations have been determined solely in accordance with per capita relativities. While these funds have been effectively absorbed into financial assistance grants their notional value as identified road grants to each State/Territory is noted in the Commonwealth Budget papers.

4.24 The Commonwealth Grants Commission takes road maintenance needs into account when assessing State/Territory financial assistance and is examining road maintenance assessment as part of research leading to the 1999 review of how annual relativities are calculated (Sub 667, *Submissions* p. 1528). The view was expressed that some States/Territories, such as NSW, have experienced a reduction in the amount of untied funds they receive due to the transition from the national arterial based allocation to the per capita based determination (Sub 686, *Submissions* p. 1678).

4.25 States/Territories generally considered that the amount of untied (identified) road funding received from the Commonwealth as general purpose payments was insufficient when compared with the level of fuel excise collected from jurisdictions by the Commonwealth (Sub 686, *Submissions* p. 1678).

Identification of untied road grants

4.26 The committee noted that the separate identification of State/Territory untied road grants within financial assistance grants forms an important part of the administrative arrangements underlying the Commonwealth's roads of national importance program. The guidelines for funding under this category state:

> Commonwealth funding will be conditional on the relevant State or Territory having allocated all the Commonwealth provided untied road grants to roads in the State or Territory and maintaining the existing level of commitment to the road declared to be a road of national importance. (Sub 482, *Submissions* p. 948)

4.27 The formal agreements the Commonwealth has signed with NSW and Queensland in relation to the reconstruction of the Pacific Highway (a road of national importance) include this requirement and the undertaking that the Commonwealth will continue to separately identify the untied component in the Commonwealth Budget for the period of the Pacific Highway agreements (ten years from 1995–96 to 2005–06) (Sub 686, *Submissions* p. 1680).

4.28 The Commonwealth Grants Commission put the view that from 1997–98, when the untied road grants are fully absorbed into financial assistance grants, there will be 'little point' in identifying part of the general revenue pool as road grants (Sub 667, *Submissions* p. 1527).

Untied funding to local government

4.29 Untied local road funding is administered by the National Office of Local Government under the *Local Government (Financial Assistance) Act 1995* (LGFA Act). Allocations to local government bodies are distributed in accordance with recommendations of the local government grants commissions in each State/Territory in accordance with national principles determined under the LGFA Act. In the case of identified road grants, these principles refer to road expenditure need (Sub 652.01, *Submissions* p. 2175). Prior to this arrangement, the Commonwealth, via the transport department of the day, was closely involved in the allocation of this funding.

4.30 The Australian Local Government Association (ALGA) supported the continued use of untied but identified road funding as a component of financial assistance grants (Sub 447, *Submissions* p. 407). In addition, the ALGA considered that 'Commonwealth grants have in fact proven to be a stable source of funding for both State and Local Government as they have been maintained in real terms over recent years.' (Sub 447, *Submissions* p. 405)

4.31 The committee sought assurances from local government bodies that the untied local road funds were actually being spent on roads and that value for money was being achieved in addition to the achievement of specific outcomes. The ALGA reported that following the recommendations of the 1993 report of the House of Representatives Standing Committee on Transport, Communications and Infrastructure, *Driving the Road Dollar Further,* councils were now reporting annually on their local roads expenditure through the Local Roads Expenditure Project established in 1993 and that the returns indicate that local government is spending well in excess of what they receive from the Commonwealth (Sub 447, *Submissions* p. 394).

4.32 The ALGA noted that total local government expenditure on roads is around six times the Commonwealth untied road funding allocation and that estimated necessary expenditure on local roads exceeds existing expenditure by approximately $1 billion (*Transcripts,* p. 844).

4.33 The ALGA noted that they 'are putting a very high emphasis on continuing research, benchmarking and market testing' and that 'there is a much more professional approach now, because local government, quite frankly, cannot afford not to; as the funds shrink, we have to do more with them' (*Transcripts*, p. 851).

4.34 The National Office of Local Government, which has had responsibility for the administration of local road funding since 1991–92, was unable to comment on the efficiency of local government in relation to road provision and maintenance. The committee notes that there appears to be a lack of formal scrutiny or assessment by the Commonwealth in relation to how efficiently local government utilises the Commonwealth's untied road funding.

Appropriateness of untied (identified) road funding

4.35 As noted in chapter 2 the committee considers the current procedure of untying road funding then effectively retying it via its separate identification in the Budget papers and through seeking assurances that it be spent on roads is insupportable.

4.36 The committee considers that as it is the Commonwealth's intention that these funds be spent on roads, their provision in the form of tied block grants will achieve this end while still allowing States/Territories and local government the flexibility to allocate these funds to road projects in line with their own priorities. As block grants, the committee envisages no Commonwealth involvement in the allocation to, or approval of, specific road projects.

4.37 While the committee acknowledges the assurances given to the Hon John Sharp MP, the then Minister for Transport and Regional Development, that the untied funds paid to States/Territories would be spent on roads, there is no certainty in such assurances. During public hearings, the Tasmanian Department of Transport noted that it was unable to provide an assurance that all the untied funding provided to Tasmania as identified road grants was spent on roads as the 'money goes into the Treasury coffers and then we get an allocation.' (*Transcripts*, p. 528)

4.38 In moving to tied block grants, the committee considers that the Commonwealth should consult with appropriate Commonwealth agencies, States/Territories' and local government on the most appropriate administrative mechanism to support this arrangement. In addition, with the full absorption of the States/Territories' untied funding into the financial assistance grants pool from 1997–98, and the subsequent variation in the levels of funding provided to each State/Territory since 1994 (when the initial untied allocation was based on national arterial funding levels), the committee considers that some consideration should be given to the criteria to determine an appropriate level of individual State/Territory allocations.

4.39 The committee considers that the provision for indexation which currently applies to the untied road funding provided to States/Territories and local government should continue with the provision of these funds as tied block grants.

4.40 **Recommendation 16**

The committee recommends that untied road funding paid to States/Territories and local government be paid as tied block grants and maintained in real terms.

Delivery of tied Commonwealth funding

Funding mechanism

4.41 Tied Commonwealth road funding, as noted earlier, is provided under the *Australian Land Transport Development Act 1988* (ALTD Act). This legislation requires the establishment of a trust fund into which a proportion of fuel excise is hypothecated to fund the Commonwealth's road program. The ALTD Act refers to this as a road user charge and specifies a charge rate of 4.95 cents per litre, and provides for the determination of an alternative charge rate by the Minister in consultation with the Treasurer under section 10 (2) of the Act.

4.42 In practice, the actual level of road funding was determined annually by the Commonwealth in the budget context and, then, an appropriate charge rate on fuel excise was determined at the end of each financial year to reflect the predetermined annual funding level. The practice of retrospectively determining the charge rate has been discontinued. Annual Commonwealth road funding is now determined in the budget context without reference to fuel excise collection.

4.43 Funds are paid into the ALTD trust fund from the consolidated revenue fund only when required for immediate payment to States/Territories. As the annual appropriation lapses at the end of the financial year, no funding can be left in the trust fund to carry over to the next financial year.

4.44 The Department of Transport and Regional Development noted that the use of a trust fund linked with hypothecated fuel excise was meant to provide some certainty in road funding from year to year (Sub 482, *Submissions* p. 873). However, it appears that the annual determination of road funding impedes the realisation of any benefits that may be associated with the use of a trust fund mechanism as funding cannot be carried from year to year and the level of funding is uncertain from year to year.

4.45 In addition, the committee considers that the practice of retrospectively setting the road user fuel excise charge rate and the subsequent discontinuation of this practice means that the Commonwealth does not currently hypothecate fuel excise to road maintenance and construction. It appears that the use of a trust fund is an anomaly when funding levels are determined annually in the budget and not linked to hypothecated fuel excise. Hypothecation and fuel excise are discussed later in this chapter.

4.46 The committee considers that a review of the *Australian Land Transport Development Act 1988* (ALTD Act) should be undertaken to ensure provisions such as the determination of a charge rate and the use of a trust fund are still relevant. The administration of the Commonwealth road program and the application of the ALTD Act are considered in more detail in chapter 5.

Need for certainty

Limitations of annual funding approach

4.47 Evidence before the committee strongly argued that the annual funding approach associated with the Commonwealth's road program fails to promote certainty in Commonwealth funding which results in the inefficient use of funds and ineffective long term planning. The unpredictability of funding adversely affects Commonwealth/State/Territory road investment decision making as well as the efficient operation of the road construction industry which delivers the bulk of the construction on the national highway and an increasing proportion of the maintenance.

4.48 Unpredictable annual funding levels (decreases or increases) can undermine the confidence of the road construction industry to undertake investment in efficient high cost road construction equipment (Sub 482, *Submissions* p. 873). The Cement and Concrete Association noted that the loss of skilled operators due to fluctuating funding is a significant issue for the road construction industry (*Transcripts,* p. 69).

4.49 CSR Emoleum, a major road surfacing company, noted that 'uncertainty of future funding levels has inhibited reinvestment in new equipment leading to missed opportunities for implementing new technology, gaining efficiency or achieving higher quality of finished work.' (Sub 428, *Submissions* p. 204)

4.50 Various States/Territories expressed the need for greater certainty, over a number of years, in Commonwealth road funding. The NSW Roads and Traffic Authority (RTA) noted that 'the present year by year assessment and funding of national highway needs is inadequate' and that the RTA 'desperately need certainty of Commonwealth funding for at least three years.' (*Transcripts,* p. 35)

4.51 The NT Government similarly noted that 'there needs to be greater certainty in the level of Commonwealth funding for roads, particularly for the national highways' and that 'the most pressing need is for an assured level of funding to be provided over a number of years so that major asset maintenance and rehabilitation projects can be planned and constructed efficiently.' (Sub 645, *Submissions* p. 1323)

4.52 The Queensland Department of Main Roads noted that 'the current process of annual appropriations raises a considerable degree of uncertainty for the roads program beyond the current year, particularly considering the required lead times for project planning, environmental clearances and public consultation.' (Sub 643, *Submissions* p. 1282)

4.53 The Department of Transport and Regional Development reported that the lapsing of annual appropriations at the end of each financial year has led to a 'rush to complete expenditure before the end of the financial year, encouraging smaller than optimal projects so that they can more easily be adapted to the annual budgetary cycle.' (Sub 482, *Submissions* p. 874) In addition, the annual determination of funding levels appears to be inconsistent with the funding of large national highway projects which may take many years to complete.

4.54 The restrictiveness of an annual funding approach can lead to difficulties when funding works in Australia where a range of climatic factors limit when road construction can occur. For example, northern Australia needs to program works to beat the start of the wet season while Tasmania's construction window needs to avoid the cool wet winter conditions which may occur as early as March (Subs 428, 482, 664, *Submissions* pp. 204, 874, 1507).

4.55 The view was expressed that significant efficiencies may accrue from attaching a long term maintenance component to a construction contract or a design and construct contract and that the annual funding approach is inhibiting increased involvement by the private sector in the provision and maintenance of road infrastructure.

4.56 The Department of Transport and Regional Development noted that 'the private sector requires certainty before entering into long term contracts, and an annual "drip feed" approach to funding provides no such certainty.' (Sub 482, *Submissions* p. 886) Private sector involvement is discussed in detail in chapter 6.

4.57 The committee considers that the uncertainty of Commonwealth road funding levels from year to year is impeding the ability of the Commonwealth and the States/Territories to undertake long term planning and is inhibiting the efficient operation of the construction industry resulting in higher road construction costs.

Achieving certainty

Rolling three to five year program

4.58 Evidence was received that increased certainty could be achieved by introducing a rolling three to five year funding approach in place of the annual determination of funding levels. This would provide a clear indication to the States/Territories and the road construction industry of the level of the Commonwealth's commitment over the period, which would allow more efficient planning by government and industry in the knowledge that funding levels will not suddenly increase or decrease from year to year (Sub 428, *Submissions* p. 204).

4.59 The Victorian Government noted that 'rolling five year programs would assist efficiency through increased certainty, continuity and integration of activities from planning to construction.' (Sub 689, *Submissions* p. 1741)

4.60 A rolling three year funding arrangement was introduced by the Commonwealth Government in 1995–96 to provide some certainty of funding levels, however, this was over-ridden by the need to exercise expenditure restraint in the 1996–97 Budget (Sub 482, *Submissions* p. 862).

Need for budget flexibility

4.61 The Commonwealth Departments of Finance and the Treasury cautioned against the introduction of a rolling three to five year funding program noting the need for the Commonwealth to maintain maximum budget flexibility. The Treasury noted that 'any move to a three to five year rolling fund arrangement would bring with it a commensurate reduction in the Commonwealth's flexibility to adjust both the level and composition of its expenditures in response to changing economic and social circumstances.' (Sub 768, *Submissions* p. 2096)

4.62 The Treasury further noted that some guidance to future road funding allocation was already contained in the forward estimates included in the Commonwealth budget papers which presented the road program allocation for the current year and three subsequent years (Sub 768, *Submissions* p. 2096).

4.63 While the committee appreciates the need for the Commonwealth to maintain budget flexibility, evidence presented during the inquiry indicates that the annual funding approach represents a significant impediment to achieving efficiencies in road funding and the committee considers a case exists for the provision of increased certainty in road funding. Further, while the forward estimates in the budget do provide a guide as to likely funding in the next three years, there is no guarantee or commitment by the Commonwealth attached to the estimates and therefore little certainty offered to States/Territories or the road construction industry.

4.64 *The committee considers that increased certainty in Commonwealth road funding is of fundamental importance in order for the Commonwealth to fulfil a strategic role in road funding,* as discussed in chapter 2.

Variations to annual funding approach

4.65 The Department of Finance advanced the proposition that it may be desirable to introduce increased certainty with regard to the national highway maintenance budget noting that 'it is not in our interest to see the significant capital investment we have made in roads over the last twenty years run down and it is reasonable to expect that to be maintained.' (*Transcripts*, p. 792)

4.66 The Department of Finance noted that a possible variation to the annual appropriation funding approach which would also facilitate a more effective asset management approach (discussed later in this chapter) would be to separate road maintenance and road construction and establish the maintenance budget on a 'multi-year basis' (Sub 443, *Submissions* pp. 296–7). The Department of Finance noted that it did '…not see the same imperative in relation to construction of new parts of the NHS [national highway system].' (*Transcripts,* p. 792)

4.67 The Department of Transport and Regional Development noted that, in relation to the construction component, 'it would be very helpful if even part of the allocation could be guaranteed on a multi-year basis, not necessarily the whole 100 per cent of the program.' (*Transcripts*, p. 736)

4.68 The committee considers that increased certainty is needed in both the construction and the maintenance components of the Commonwealth's road funding program and that would best be achieved by introducing a rolling three year program with funding guaranteed for that period. In the absence of achieving a guarantee covering funds provided over a three year period, an alternative suggestion is that a guarantee be applied to a proportion of the funds. Funding for each program would be guaranteed for the budget year then reduced by a percentage in the remaining out years of the program, for example one hundred per cent guarantee in the budget year, eighty per cent in the second year, sixty per cent in the third year and so on for the period of the program.

4.69 This alternative approach could provide a degree of certainty for the States/Territories and industry and provide a solid planning basis for the Commonwealth as well as a degree of flexibility for the Commonwealth in addressing economic circumstances in future years.

4.70 Recommendation 17

The committee recommends that the Commonwealth ensure greater certainty in its tied road funding program by implementing a guaranteed funding approach for a rolling three year period.

Road funding models

4.71 The reliance on annual funding for its road program, combined with the lack of a national strategy, suggests that the Commonwealth does not recognise road infrastructure as a long term capital asset. Evidence was presented that the Commonwealth should give consideration to the introduction of an asset management approach to its road funding program to ensure efficient investment decisions (Subs 425, 443, 482, 646, *Submissions* pp. 181, 288, 862, 1391).

Asset management approach

4.72 The Australian National Audit Office (ANAO) noted that it recommended in its 1993–94 efficiency audit report, *The National Highway 'Lifeline of the Nation'*, that the then Department of Transport and Communications should adopt an asset management model for network construction planning (Sub 425, *Submissions* p. 181). Such an approach would incorporate long term planning, pavement evaluation and usage analysis to ensure that investment plans are responsive to change, and funds are allocated at the optimal time over the life of the asset.

4.73 The Department of Finance noted that the significant amount of funding allocated by the Commonwealth for the maintenance and development of the national highway system has resulted in the creation of a valuable national asset. The Department of Finance agreed with the conclusion reached by the ANAO in its 1993–94 report on the national highway that it should be managed in line with sound asset management principles (Sub 443, *Submissions* p. 288).

4.74 ANAO noted that, at the time, the Department of Transport and Communications took the view that it was not the asset manager and that responsibility lay with the States/Territories. However, it appears that the Department of Transport and Regional Development has reconsidered its position on asset management and has noted that ideally, the Commonwealth road program, as a long term capital works program, should be managed in a similar manner to a private capital works program incorporating the following attributes:

- there would be long term strategy for capital investment;
- assets would be valued and those with a finite working life would be depreciated;
- funding would be based on known/calculated maintenance needs and investment needed to meet expected increases in demand, and, ideally, would vary in line with increases or reductions in vehicles using the road system;
- investment would be considered on a whole-of-life basis for both costs and benefits; and
- investment proposals would be evaluated in a consistent and transparent manner. (Sub 482, *Submissions* p. 862)

4.75 The Australian Automobile Association (AAA) also considered that the national highway asset should be subject to asset management on a commercial basis (Sub 646, *Submissions* p. 1391). The AAA has proposed the use of asset management principles in the context of managing the Commonwealth road program under a Federal Roads Corporation. This concept is discussed further in chapter 5.

4.76 An asset management approach is already used by most States/Territories in managing the funding of their road infrastructure assets. However, unlike the States/Territories, the Commonwealth does not own the road infrastructure it funds and therefore an appropriate accounting model would need to be developed to provide for this situation.

4.77 The view was put that the Commonwealth's non-ownership of the national highway system should not be seen as a complicating factor in introducing a more commercial asset management approach (Sub 468, *Submissions* p. 655). The NSW Government noted that it fully funds State roads which are generally vested in local councils, but the Roads and Traffic Authority accounts for the value of these roads in its annual report (Sub , 686 *Submissions* p. 1675). The Tasmanian Government noted that non-ownership of the national highway asset would not preclude an asset management approach but it would prevent the inclusion of the national highway asset in the Department of Transport and Regional Development's accounting documents (Sub 664, *Submissions* p. 1517).

4.78 The introduction of an asset management approach would require the Department of Transport and Regional Development to develop an extensive data base. The Tasmanian Government noted that the following information would be needed to introduce an asset management approach in relation to the national highway system:

- valuation details,
- lifecycle modelling to determine time/load costing,
- usage and underlying transport demand,
- elasticity of demand for possible tolls or user charges,
- alternative services. (Sub 664, *Submissions* pp. 1516–17)

4.79 Fundamental to establishing an asset management model is the need to value the asset and to estimate depreciation. A common method for road authorities to value road infrastructure assets is to use replacement cost. This is consistent with the recommendations of the Steering Committee on National Performance Monitoring of Government Trading Enterprises which produced the *Guidelines on Accounting Policy for Valuation of Assets of Government Trading Enterprises* in 1994.

4.80 A valuation model for Commonwealth roads based on the Steering Committee's recommendations would provide for the valuation of infrastructure assets including earthworks, pavements, bridges as well as land on a current replacement cost basis, and also provide for the depreciation of assets other than land (Sub 482, *Submissions* p. 863).

4.81 The committee considers that an asset management model should be developed for the national highway system. However, prior to its introduction, an assessment needs to be undertaken to determine the Commonwealth's resource capacity to gather, maintain and analyse necessary data to effectively implement such an approach.

4.82 **Recommendation 18**

The committee recommends that the Commonwealth, in consultation with States/Territories, establish an asset management strategy for the national highway system.

Partnerships with States/Territories

4.83 As indicated in chapters 2 and 3, the development of a strategic plan for an integrated road system in Australia incorporating all levels of government requires a partnership approach in planning. It has been demonstrated that partnership funding arrangements between the Commonwealth and the States/Territories offer a mechanism whereby large scale works which may be beyond the scope of individual governments can proceed with certainty. An example of the success of this partnership approach can been seen with the Pacific Highway Reconstruction Program under which the Commonwealth has entered into formal agreements with the NSW and Queensland Governments to match funding dollar for dollar up to $75 million per annum for ten years to accelerate the upgrading of the Pacific Highway.

4.84 The certainty offered through the ten year Pacific Highway agreements has provided the opportunity to achieve considerable savings in negotiating a design and construct contract with a lengthy maintenance clause for a major section of the Pacific Highway. As noted earlier in this chapter, the private sector requires certainty of funding before it will commit to long term contracts, such as construct and maintain contracts. Design, construct and maintain contracts are discussed further in chapter 6, which deals with private sector involvement in roads.

4.85 The view was expressed as a prerequisite to entering into shared funding arrangements, the Commonwealth would need to develop, with States and Territories, an appropriate strategic plan for its involvement and equitable processes for the selection of projects and allocations of funds that match agreed objectives and targets (Sub 468, *Submissions* p. 646).

4.86 The Australian Local Government Association (ALGA) noted that shared funding arrangements between the three tiers of government could only be developed in the context of an overall road strategy which focused on outcomes developed within the strategy, thereby avoiding funding distortions caused by arbitrary divisions between road networks (Sub 447, *Submissions* p. 408).

Hypothecation of fuel excise

4.87 The Commonwealth levies an excise on the sale of fuel as part of its total tax structure. In 1995–96 Commonwealth fuel excise was charged at a rate of approximately 34 cents per litre and generated approximately $8.9 billion in revenue. The receipts from fuel excise are used to fund a wide range of Commonwealth outlays including road funding.

4.88 While fuel excise is not levied specifically for the purposes of generating funding for roads, the Commonwealth has nevertheless created a link between the two by providing for the hypothecation (earmarking) of a proportion of fuel excise to fund its road programs under Commonwealth road funding legislation since the 1980s. The evidence suggests that the community's perception of such a link is very strong.

Concept of hypothecation

4.89 Hypothecation is the process of transferring identified taxation revenue to a particular expenditure program. Hypothecation requires an ongoing funding link between the taxation and expenditure programs.

4.90 The advantages of hypothecation are that:

- it may allow a tax to act as a proxy for user charging, thus encouraging a more efficient use of resources;
- it may allow taxes to be imposed on socially undesirable activities and directed to programs that offset the costs of such activities;
- it may improve the certainty of funding for an expenditure program; and
- it may improve the public acceptability of a tax by linking the tax to a desirable expenditure program.

4.91 The disadvantages of hypothecation are that:

- it reduces discretionary control over expenditure and taxation policies, constraining government's ability to manage fiscal policy; and
- it may not be consistent with ensuring that taxation measures impose the least cost on the economy or that expenditure measures realise the greatest gain.

Hypothecation and Commonwealth road programs

4.92 The Commonwealth has used the hypothecation of fuel excise at various times to fund, or partly fund, its road programs since the 1920s. The practice was discontinued in 1959 but was re-introduced with the introduction of the *Australian Bicentennial Road Development Trust Fund Act 1982* (ABRD Act).

4.93 The ABRD Act was introduced in 1982 to boost the Commonwealth's road construction effort and was funded via the full hypothecation of an additional one cent, later two cents, per litre surcharge on top of existing fuel excise. The ABRD Act was additional to, and ran concurrently with, the *Road Grants Act 1981* (RGA Act) which was the Commonwealth's principal road funding legislation of the day. The RGA Act was replaced by the Australian Land Transport (Financial Assistance) Act 1985 (ALT Act).

4.94 Hypothecation arrangements were continued with the ALT Act, however, the ALT Act identified a proportion of existing fuel excise to be hypothecated to roads rather than introducing an additional excise, as was the case with the ABRD Act. The ALT Act introduced an initial nominal charge rate of 3.66 cents per litre on existing fuel excise and, whereas the ABRD Act charge rate was ultimately fixed at 2 cents per litre, the ALT Act provided for the indexation of the charge rate to maintain funding levels in real terms.

4.95 Total road funding under the ALT Act for the first year (1985–86) was specified in the Act at $810 million. The charge rate of 3.66 cents per litre actually generated funds in excess of $810 million and these were repaid to consolidated revenue. Subsequent budget decisions to maintain total annual road funding allocations for following years at 1985–86 levels resulted in annual reductions in the charge rate to match predetermined allocations. Consequently, the indexation provisions of the ALT Act had no effect on funding levels.

4.96 The practice of hypothecating fuel excise to road works was continued with the introduction of the *Australian Centennial Roads Development Act 1988* (ACRD Act) which replaced the ABRD and ALT Acts in 1989. (The ACRD Act was retitled the *Australian Land Transport Development Act 1988* in 1991.) An initial charge rate of 4.95 cents per litre was specified in the Act upon its commencement and the legislation also provided for the indexation of the charge rate and the facility for the Minister in consultation with the Treasurer to determine an alternative charge rate.

4.97 The ACRD Act specified a guaranteed minimum level of funding of $1.226 billion in the first two full years of the Act (1989–90 and 1990–91). Funding in the second year was indexed to maintain funding levels. The Act provided for the retrospective determination of an alternative charge rate should the guaranteed funding level not be reached at the end of each financial year. In the following years the funding level was decided in the Budget with the charge rate determined retrospectively to match the predetermined funding level.

4.98 The Department of Transport and Regional Development advised that the retrospective setting of the charge rate was discontinued after 1993–94 'as it was administratively cumbersome and had no impact on funding levels'. The Department noted that as long as the amount of money appropriated for road funding under the *Australian Land Transport Development Act 1988* (ALTD Act) in the Budget is less than that which would be generated from applying the 4.95 cents per litre default charge rate, there is no legal requirement to determine a specific charge rate. The Department noted that the charge rate would need to be set at 3.1 cents per litre to equate to current funding levels under the ALTD Act (Sub 482.05, *Submissions* p. 2424).

4.99 Therefore, the hypothecation arrangements which began with the *Australian Bicentennial Road Development Trust Fund Act 1982* have been progressively diluted and modified to the point now where they have been discontinued.

4.100 The committee considers that while the full hypothecation of an additional surcharge on fuel excise to fund a discrete road program may appear to have merit, as with the ABRD program, the subsequent application of hypothecation arrangements to earmark a proportion of existing fuel excise within a preset upper funding limit has little or no value. It does little to enhance funding certainty or engender public acceptability of the program.

4.101 The committee considers that the more recent practice of retrospectively setting the fuel excise charge rate to match a predetermined funding level to be somewhat pointless. The futility of this practice has been highlighted by the fact that it has been discontinued with no change to the operation of the road program.

4.102 The main outcome of the more recent application of hypothecation arrangements is to perpetuate the perception within the community that a link exists between fuel excise and road funding. The committee considers that in the absence of an ABRD style program such a link is spurious as fuel excise revenue is not collected to specifically fund roads. As noted earlier, the money raised from fuel excise is general revenue and is used to fund a range of government outlays.

4.103 The perception of a link between fuel excise and road funding at the Commonwealth level creates an expectation in the community that the Commonwealth has the financial capacity to spend more on roads than it does by virtue of the amount of revenue it generates from fuel excise. This expectation is not sustainable.

4.104 The capacity of the Commonwealth to fund a road program is determined by the priority it places on roads and other government programs in the context of the overall level of available funding. At the Commonwealth level the amount of funding made available for roads has no direct connection to the level of revenue generated from fuel excise.

Hypothecation and future road programs

4.105 The committee notes that one of the main benefits advanced for the use of hypothecated fuel excise in road funding is the potential for such an arrangement to provide for increased certainty in funding levels from year to year, however the committee considers that this may not necessarily be the case.

4.106 The committee notes that fuel excise receipts may fall (or the expected growth rate of excise receipts may fall) in line with slow economic growth leading to a reduced road budget at a time when it may be desirable for the government to boost road funding to stimulate economic activity. In addition, the steady improvement in vehicle efficiency may also lead to a reduced road budget should it be drawn from a hypothecated proportion of fuel excise revenue.

4.107 The committee recognises, however, that additional road funding may be sourced in the Budget from consolidated revenue and added to supplement a hypothecated road program as was the case in the early 1990s with the injection of road funding under the then Government's One Nation initiative.

4.108 The committee also notes the potential for changes in future Commonwealth taxing arrangements which could impact on fuel excise and in turn a road budget sourced from a hypothecated proportion of fuel excise.

4.109 Treasury noted that 'we do not want to rule out hypothecation possibilities. But we would rather do that [hypothecation] in consideration of new taxes rather than in consideration of the existing taxes, because the existing taxes are fully spent in other areas.' (*Transcripts*, p. 804)

4.110 The Treasury considered that any additional excise on fuel should only be imposed and hypothecated for a particular project or fixed term program and that it would be inappropriate to add additional excise for roads generally and have it collected indefinitely 'because the decision on road funding at any point in time might be quite independent of the revenue that you collected from that base.' (*Transcripts*, p. 805)

4.111 The committee considers that the application of hypothecation arrangements following the ABRD legislation has had little influence on funding certainty as funding levels have been dictated by the government of the day in line with economic circumstances and government priorities. The committee considers that certainty in funding for the Commonwealth road program can best be provided through a strong commitment from the Commonwealth to the achievement of clearly articulated strategic outcomes contained in a national transport strategy.

4.112 As recommended earlier in this report, the Commonwealth's commitment to the achievement of strategic road outcomes should be accompanied by an appropriate and guaranteed financial package, for a rolling three year period, sourced from consolidated revenue.

4.113 **Recommendation 19**

The committee recommends removing the hypothecation provisions from the *Australian Land Transport Development Act 1988.* Further, the committee recommends that the Commonwealth source future road funding directly from consolidated revenue in line with agreed outcomes in the integrated strategic plan for the national transport network proposed in Recommendation 4.

Road user charges

4.114 The view was put that the linking of road user charges (which may include fuel excise) to road funding would provide for greater confidence and efficiency in long term road infrastructure planning by establishing a more certain and stable funding source (Sub 686, *Submissions* p. 1674).

4.115 The Business Council of Australia (BCA) noted that existing road user charges such as fuel excise, registration and licence fees currently exceed road expenditure by a ratio of more than two to one. Therefore, the challenge facing governments in Australia is to introduce a road user charge that reflects the cost of providing and maintaining road infrastructure in a way that avoids the impression that road users are paying twice for road infrastructure (Sub 649, *Submissions* p. 1413).

4.116 The Industry Commission noted that 'direct usage charges (including a component to reflect costs imposed on third parties) would signal to users the social costs of road use. And road usage patterns in the light of those charges would provide better information to road authorities on the value that users put on particular roads.' (Sub 416, *Submissions* p. 108)

4.117 The BCA's 1994 report *Refocussing Road Reform* noted that 'the aim of user charges or road pricing is, therefore, to internalise the externalities generated by road use in order to provide the right pricing signals to users of the road system.' (Cox, J B and Meyrick, S J, 1994, p. 182) The BCA noted that 'the user charges should therefore attempt to recover congestion, pollution, social costs associated with accidents as well as road damage costs.' (Sub 649, *Submissions* p. 1413)

4.118 The National Farmers Federation (NFF) noted the following principles for the setting of road user charges:

- charges should reflect the total cost of vehicle use, including the social costs of congestion and environmental damage,
- road user prices should not be used as a general taxation measure, especially for freight and business use, and
- revenue raised from road users should be invested in road maintenance and infrastructure development. (Sub 744, *Submissions* p. 1900)

4.119 The NFF considered that 'these basic tenets of rational road pricing have been consistently ignored by Australian governments.' (Sub 744, *Submissions* p. 1900)

Fuel excise as a road user charge

4.120 There was support expressed in the evidence for the use of fuel excise as a road user charge.

- The Australian Automobile Association (AAA) noted that 'currently the most practical form of road user charge is one based upon fuel' and that in time the use of 'electronic metering devices' will have a place in road user charging (Sub 646, *Submissions* p. 1363).

- Main Roads Western Australia stated that 'the simplest, and arguably most efficient, charging mechanism for road use is via a fixed amount per unit of fuel used. Vehicle fuel consumption is a reasonable indicator of road use and wear. It is certainly the best of the two low cost options - fuel based charges and vehicle licence fees.' (Sub 468, *Submissions* p. 647)

- Main Roads Western Australia further noted that 'sourcing road funds from consolidated revenue is not preferred … it is important for users of a service to see a linkage between the amount they pay and the service they receive. This is not achieved when road funding is drawn from the consolidated revenue fund.' (Sub 468, *Submissions* p. 648)

- The Department of Transport and Regional Development noted that 'although fuel excise collections are not a perfect "road user charge" the level of excise collected is a reasonable indicator of demand for roads.' The Department further noted that 'the level of road funding should be linked to the level of demand as measured by fuel excise collections' and 'the simplest administrative mechanism to achieve this would be to dedicate a fixed proportion of fuel excise collections to roads.' (Sub 482, *Submissions* p. 866)

4.121 As it is relatively easy to collect administratively and provides some relationship to road use, fuel excise represents an attractive road user charge. However, it does not adequately address the social costs of road use. Fuel excise as a road user charge is likely to over recover social costs related to rural road use and under recover social costs related to urban road use.

4.122 The view has been expressed that should fuel excise be used as a road user charge, then differential charge rates should apply between rural and urban environments due to the greater propensity for externalities such as pollution and congestion to emerge from road use in urban environments. The National Farmers Federation suggested that fuel excise should therefore be charged at a lower rate in rural environments (Sub 744, *Submissions* pp. 1901–2).

4.123 The committee considers that in the absence of other mechanisms, fuel excise represents a reasonable road user charge that effectively relates road use and the cost of that use to the individual. The committee recognises, however, that fuel excise as a road user charge does not adequately address the social costs of road use.

4.124 The Australian Automobile Association (AAA) noted that research it has undertaken indicates that that the 'community is quite willing to pay these [road improvement] levies provided that they are clearly and demonstrably used to fund road improvements.' (Sub 646, *Submissions* p. 1386)

4.125 The ALTD Act refers to a road user charge which it defines as 'so much of each amount paid to the Commonwealth as duty of excise, or duty of customs, in respect of motor spirit, or diesel fuel.' As noted earlier, the ALTD Act provides for a charge rate reflecting the road user charge set at 4.95 cents per litre.

Need for a road user charge

4.126 The committee considers that the introduction of a road user charge would be desirable to indicate to users the price of road use in relation to road damage and externalities such as congestion, pollution and other social costs. However, the committee recognises that the determination of an appropriate road user charge regime which provides for differences in the costs associated with urban and rural road use is a complex undertaking. The committee considers that the Commonwealth should undertake research in this regard.

4.127 The committee considers that the development of intelligent transport systems (ITS) may play a significant role in the implementation and collection of road user charges in the future, in addition to their use in the collection of tolls. The committee notes the need to ensure that such systems be developed and introduced in a consistent manner to ensure compatibility between systems and the adoption of a national approach.

4.128 The committee noted that the Hon John Sharp MP, the then Minister for Transport and Regional Development, announced funding in January 1997 for a project to consider ITS literature, an audit of the extent of ITS adoption in Australia, and other research into ITS. (Sub 482.03, *Submissions* p. 2332)

4.129 **Recommendation 20**

The committee recommends that, for the national highway system, the Commonwealth with the States/Territories, examine the potential for alternative road user charges.

Broader tax debate

4.130 The 5 August 1997 decision of the High Court in *Ha and Hammond v NSW* declaring State/Territory franchise fees to be unconstitutional means that the Commonwealth has increased its dominance as the main collector of revenue from the road transport industry and other motorists.

4.131 The High Court decision has also prompted discussion on tax reform generally, including the potential for alternative tax structures. A revision of Australia's taxation system would have implications for any road funding programs linked to fuel excise collections.

Funding levels

4.132 The view was consistently expressed in the evidence before the committee that the present levels of Commonwealth funding for roads is inadequate and that a case exists for an immediate increase. The evidence suggested that the Commonwealth is underfunding the construction and maintenance of the national highway system and is providing insufficient road funding via untied grants to the States/Territories and local government.

4.133 The committee considers that, given that the level of available road funding is unlikely to ever meet the expectations of the community and industry, it is vitally important to ensure that the limited available funds are targeted to the best projects to ensure that the maximum value is being returned for the road dollar. Funding investment decision tools, such as benefit cost analysis, are discussed in chapter 5.

4.134 The committee agrees with the view put by the Australian Automobile Association (AAA), that 'deciding what to invest in is at least as important as deciding how much to invest.' (Sub 646, *Submissions* p. 1353) This underscores the importance of the development of a strategic road investment plan covering all tiers of government as recommended in chapter 2. The AAA noted that in work carried out on its behalf by the Allen Consulting Group in 1993, there was a backlog of economically viable road projects covering all road categories Australia-wide totalling between $14 and $19 billion which were unlikely to be funded (Sub 646, *Submissions* p. 1358).

National highway system

Bureau of Transport and Communications Economics research

4.135 The Bureau of Transport and Communications Economics (BTCE) has updated research and modelling it undertook for the National Transport Planning Taskforce in 1994 in relation to funding needs for the national highway system. The original work considered a period to 2015, the updated work covers a period to 2020 and has benefited from the use of updated data and refined modelling techniques.

4.136 The model developed by the BTCE assessed construction and maintenance funding needs for non-urban national highway links (and major non-national highway links), with investment needs driven by traffic volumes and heavy vehicle usage of specific road sections. The BTCE has produced estimates of funding requirements for the non-urban national highway as at 1 July 1998, and in the periods from 1999 to 2005, and from 2006 to 2020 (Exhibit 80, p. 2).

4.137 The BTCE noted that the estimates of funding it has produced represent a broad order of magnitude rather than a detailed costing. In addition, the BTCE pointed out that the funding estimates represent a purely economic assessment only of justified investment and exclude projects aimed at improved flood immunity or major realignment as the data on such projects were not available. The BTCE has noted that with these limitations the estimates should be seen as the lower limit of indicative funding requirements (Exhibit 80, p. 3).

4.138 Figure 4.5 provides the BTCE's summary of funding needs broken into categories for: capacity, bypasses, maintenance, and bridges for the non-urban sections of the national highway for each State/Territory at 1997–98 prices. The BTCE estimated that $16.8 billion will be needed for non-urban sections of the national highway system from 1998 to 2020, with $2.6 billion warranted now as backlog. Over half of the expenditure identified as economically warranted is required in the higher populated areas on the main eastern seaboard corridors.

Figure 4.5 Aggregated results for expenditure on the non-urban national highway system 1998-2020

($million 1997-98 prices)

	ACT	NSW	NT	QLD	SA	TAS	VIC	WA	**Total**
Backlog									
Capacity	4	1244	0	338	31	62	235	14	**1928**
Bypasses	0	412	0	195	0	0	0	0	**607**
Maintenance	0	6	1	31	0	0	6	3	**49**
Bridges[a]	0	0	3	1	0	1	9	1	**15**
Total	4	1663	4	565	31	63	250	19	**2599**
2005									
Capacity	0	276	0	253	72	35	10	76	**721**
Bypasses	0	117	0	288	0	0	0	0	**405**
Maintenance	4	288	197	457	229	39	153	405	**1772**
Bridges[a]	0	31	9	65	22	6	26	13	**172**
Total	4	712	206	1063	323	79	189	494	**3069**
2020									
Capacity	0	1722	0	1492	264	151	550	139	**4317**
Bypasses	0	171	0	190	27	45	90	0	**529**
Maintenance	15	1318	551	1609	618	201	683	963	**5957**
Bridges[a]	0	94	0	91	71	12	43	11	**322**
Total	15	3304	552	3382	979	408	1373	1113	**11125**
Summary									
Capacity	4	3242	0	2083	366	248	796	229	**6967**
Bypasses	0	700	0	673	27	45	90	0	**1541**
Maintenance	19	1612	750	2097	847	239	842	1372	**7777**
Bridges[a]	0	126	12	157	93	19	78	26	**509**
Total	**22**	**5679**	**762**	**5009**	**1333**	**551**	**1812**	**1626**	**16794**

Note a Bridge replacement costs assume an increase in the gross mass limit from 45.5 to 52 tonnes in

Source Exhibit 80, p. 44.

Figure 4.6 BTCE estimates of expenditure needs for non-urban sections of the national highway system

($million 1997-98 prices)

Road project type	Backlog (1998)	1999-2005	2006-2020	**Total**
Widening	1928	721	4317	**6967**
Town bypasses	607	405	529	**1541**
Maintenance	49	1772	5957	**7777**
Bridge replacement	15	172	322	**509**
Total	**2599**	**3069**	**11125**	**16794**

4.139 Figure 4.5 shows expenditure to meet maintenance needs over the time period is fairly evenly spread across the national highway system but is likely to rise significantly in the period of 2006–2020, as shown in figure 4.6. The BTCE found that 'most of the 1976 bridges on the NHS [national highway system] are in good condition, but about $24 million would be required immediately to upgrade them if mass limits for heavy vehicles were increased' to 45.5 tonnes for articulated trucks was introduced. This figure was for the national highway system and does not include other bridges where the BTCE noted 'costs could be expected to be much higher because bridges are not in as good a condition.' (Exhibit 80, p. viii)

4.140 The BTCE has published the views of the States/Territories on the results of its modelling (Exhibit 80, Appendix. V). The committee notes that the States/Territories generally considered the results to be significant underestimates of national highway funding needs to 2020. The committee acknowledges the concerns of the States/Territories in relation to the estimates but believes that the estimates nevertheless provide a useful starting point to consider funding needs. The committee considers the BTCE should continue to work with the States/Territories to further refine these estimates.

Maintenance

4.141 Given the importance of the national highway system to industry and the community and the Commonwealth's significant financial investment in the system since its inception in 1974—some $11 billion—the adequate maintenance of the national highway asset should be seen as a major priority for the Commonwealth. Underfunding maintenance is a false economy which will only lead to decreased efficiency of the system and increased maintenance costs in later years. The development of an asset management approach to national highway investment, as recommended earlier in this chapter, could assist in reaching appropriate investment decisions.

4.142 In 1997–98 the Commonwealth is allocating $329.2 million for national highway maintenance which represents a decrease of approximately $15.8 million on 1996–97 maintenance allocation of $345 million.

4.143 The modeling undertaken by BTCE on funding requirements for non-urban national highways indicated that close to $8 billion will be required to maintain the national highway system to the year 2020, with over half this amount required on the Melbourne–Sydney and Sydney–Brisbane corridors. The BTCE research indicated that a backlog of maintenance work totalling $49 million will exist as at 1 July 1998. The BTCE estimated that $1.772 billion would be required between 1999 and 2005, and a further $5.95 billion would be required for maintenance works between 2006 and 2020 (Exhibit 80, pp. viii, ix).

4.144 The BTCE estimate of close to $8 billion for maintenance expenditure on the national highway system over the 22 year period to 2020 equates to approximately $363 million per annum. The committee notes that this figure excludes urban national highways and that funding in excess of the BTCE estimate would be required to allow for the maintenance of urban links over this period.

4.145 On the basis of earlier BTCE estimates, the Department of Transport and Regional Development noted that maintenance funding in the order of $300–350 million per annum, maintained in real terms, would ensure that the existing national highway asset can be adequately maintained into the foreseeable future (Sub 482, *Submissions* p. 855). The committee notes that current funding allocations for national highway maintenance ($329.2 million in 1997–98) is at the mid point of this range.

4.146 The Department of Transport and Regional Development indicated that information provided by the States/Territories, when reporting in the context of their maintenance performance agreements, suggested that the condition of the national highway generally is being maintained (Sub 482, *Submissions* p. 855).

4.147 The 1993 report of the House of Representatives Standing Committee on Transport, Communications and Infrastructure, *Driving the Road Dollar Further*, found the maintenance of the road network to be the most important aspect of the road management task. In recognition of this importance, the Commonwealth has introduced national highway maintenance performance agreements with all States/Territories which promote an outcomes approach to maintenance and provide the States/Territories with the maximum freedom to manage national highway maintenance funding to achieve agreed outcomes. Performance agreements are discussed in chapter 5.

4.148 The committee considers that, as part of the development of a strategic road funding plan, the Bureau of Transport and Communications Economics should continue to work closely with the States/Territories to produce a comprehensive picture of national highway maintenance needs well into the future to determine adequate funding levels.

Construction

4.149 The Commonwealth is providing $354.4 million for national highway construction works in 1997–98 compared with $362 million in 1996–97.

4.150 The BTCE modelling indicated that approximately $9 billion is required for non urban national highway construction works to the year 2020, with a backlog of works totalling around $2.6 billion existing as at 1 July 1998. The BTCE assessed that $1.3 billion would be required between 1999 and 2005, and $5.2 billion would be required between 2006 and 2020.

4.151 The BTCE estimate of the construction needs for non-urban national highway over the 22 year period to 2020 of approximately $9 billion equates to approximately $409 million per annum excluding urban national highway needs. The committee notes that the high cost of urban road construction will add considerably to this estimate.

4.152 The Department of Transport and Regional Development has estimated that annual construction funding of around $625 million (including an amount of $150 million for urban works) would be required as a base level to enhance the existing national highway asset (Sub 482, *Submissions* p. 865).

4.153 The committee considers that for the Commonwealth to adequately fulfil its role, its funding for national highway construction should be increased.

Roads of national importance

4.154 The roads of national importance category was introduced by the Commonwealth in 1996. The category was established in recognition of the fact that many of the roads producing national benefits fell outside the declared national highway system, such as the Pacific Highway.

4.155 The Commonwealth is providing $112.2 million for roads of national importance in 1997–98, representing a significant increase from 1996–97 funding of $87 million.

4.156 The States/Territories generally supported the roads of national importance category but expressed concern that potential existed for the roads of national importance category to draw funding away from the national highway system. The NSW Roads and Traffic Authority noted that 'we are somewhat disappointed that national highway funding seems to be diverted into roads of national importance.' (*Transcripts*, p. 34)

4.157 Another concern expressed in evidence was that the roads of national importance program appeared to lack a national strategic focus. The need to develop a national roads strategy was outlined in chapter 2. The guidelines for roads of national importance are noted in chapter 3.

4.158 The Department of Transport and Regional Development noted that States/Territories have nominated more than $2 billion worth of works under the roads of national importance category which 'would require an investment of $200m per annum' over ten years (Sub 482, *Submissions* p. 865).

4.159 The committee supports the joint funding approach adopted with roads of national importance projects (such as the Pacific Highway where Commonwealth funding is matched on a dollar for dollar basis by the State or Territory) providing that it does not occur at the expense of the national highway system and forms part of a national strategic approach (see chapters 2 and 3).

4.160 The committee is concerned that the recent level of national highway funding, and the forecast level of funding in the Budget papers for the next three years, is significantly below the funding needs estimated by the BTCE and the Department of Transport and Regional Development. The Budget forecast for the national highway and roads of national importance funding for the years 1998–99, 1999–2000 and 2000–01 is $806.6 million, $773.2 million and $791.6 million respectively (*Federal Financial Relations 1997–98 Budget Paper No. 3*, p 67).

4.161 The committee considers that the estimates produced by the BTCE of national highway maintenance and construction needs to 2020 provide a useful starting point in considering the magnitude of the funding task facing the Commonwealth over the next two decades.

4.162 Given the concerns of the States/Territories that the figures produced by the BTCE underestimate the funding requirements, the committee considers that the BTCE should continue to work closely with the States/Territories to further refine its funding model and the quality of inputs to it. In this context the committee considers that the BTCE should also develop a model to determine funding requirements for urban national highway.

4.163 The committee considers that the Commonwealth should draw on the work of the BTCE, following further refinement of its national highway funding estimates in consultation with the States/Territories, in considering its 1998–99 national highway budget.

4.164 **Recommendation 21**

The committee recommends that the Commonwealth provide resources for the Bureau of Transport and Communications Economics to enable it to develop a model to determine road funding needs for urban national highway links.

Black spot program

4.165 In 1990–91 the Commonwealth introduced a black spot eradication road safety program. The program ran for three years to 1992–93 and allocated approximately $270 million to projects over this period. The black spot program was reintroduced in 1996–97 with $36 million committed each year for three years.

4.166 The black spot program focuses on road safety projects requiring no more than $0.5 million in Commonwealth contributions. It targets black spot locations with a proven accident history which will provide the greatest benefits for the funding. The national highway and sections of roads receiving funding under the roads of national importance program are excluded from black spot funding.

4.167 The committee notes widespread support in the evidence for the black spot program and considers that it is an effective program in enhancing road safety. The committee considers that the Commonwealth should assess the impact of the program in the community with the view to increasing funding over existing levels. As noted earlier, the committee considers that any additional funding for programs such as black spots should not come at the expense of the national highway budget.

Conclusion

4.168 The committee considers that the Commonwealth should fund road programs for which it is directly responsible including the national highway system, roads of national importance and black spots, through tied project funding to the States/Territories. The Commonwealth should provide financial assistance for road programs that are the responsibility of State/Territory or local government through tied block grants rather than untied funding which is currently identified as road grants.

4.169 The committee considers that providing certainty of road funding will help increase the efficiency of road funding programs. Certainty of road funding may allow road projects to proceed at an optimal rate and during favourable weather conditions. Certainty will also allow more scope for long term planning.

4.170 The committee considers that an asset management model should be developed for the national highway system. The model should recognise the importance of the national highway system as a long term capital asset and should act as an input to national highway investment and maintenance decisions.

4.171 The committee considers that the Commonwealth should break the nexus between fuel excise and road funding at the Commonwealth level and fund future road programs directly from consolidated revenue for a rolling three year period within the context of an integrated national transport strategic plan. The committee considers that the hypothecation provisions of the *Australian Land Transport Development Act 1988* should be removed.

4.172 The committee supports Commonwealth funding of the national highway system to maintain an adequate standard of service. The committee also supports the Commonwealth entering into partnerships with the States/Territories to develop roads of national importance, such as roads to ports and major production centres.

4.173 The committee recognises that a significant proportion of Australia's bridge stock is deficient and is emerging as a major weak link in the nation's road infrastructure. The committee considers that the Australian Transport Council in consultation with local government should develop a strategy to address the issue of deficient bridges.