Regulatory Impact Statement

Bus Safety Regulations 2010

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Victoria
The Place To Be

Summary

In recent years, the Victorian Government has embarked on a major program of reform of transport policy and legislation– the Transport Legislation Review – aimed at achieving best practice settings for the State. The **Bus Safety Act 2009** (the Act) forms part of this review and evolved from an extensive stakeholder consultation and policy development process stretching over several years.

The Act will commence operation on 31 December 2010, bringing together a range of existing regulatory provisions in relation to bus safety into a single, dedicated Act. It will be the first dedicated bus safety statute in Victoria and Australia. The Act will also update and improve existing regulatory arrangements by incorporating a range of features of modern, best-practice safety legislation, including explicit, performance oriented safety duties, a chain of responsibility approach to safety and the adoption of a comprehensive range of appropriate sanctions. The Act responds to the extremely rapid recent growth of the small bus (i.e. 10-12 seat) sector by expanding the definition of a bus to include all vehicles with more than 9 seats, rather than vehicles with more than 12 seats, as at present. It also responds to the needs of non-commercial bus operators by establishing the concept of operator registration. This is intended to be a less onerous alternative to the current requirement for all operators to be accredited.

Operators accredited under the current legislation are to be deemed to be accredited under the Act, with this deemed accreditation to last for up to 5 years. A new Section 12(3) was inserted into the **Public Transport Competition Act 1995** (PTCA) on the passage of the Act in April 2009. Section 12(3) expressly allows for the Safety Director to extend bus operator accreditations for 2 years after the enactment (i.e. the date of Royal Assent) of the Act. This transitional arrangement was adopted in order to avoid any doubt and make it clear that all current bus operator accreditations as at the date of enactment would remain on foot until 31 December 2010, at which time the deeming provisions in the proposed regulations will become operative.

The proposed regulations are essential to operationalise the new legislative arrangements established via the Act. The regulations establish a range of specific requirements in relation to the obligation on all commercial operators to be accredited, established by the Act. These include a requirement to establish and maintain Management Information Systems (MIS) and Maintenance Management Systems (MMS) and a requirement to retain all relevant records for a set period. In addition, the regulations require all buses to be inspected annually by a licensed inspector, require all school buses to be fitted with hazard warning devices and establish administrative requirements in respect of applications for both accreditation and registration. It should be noted that these substantive requirements are already applicable to all bus operators, being contained in the *Public Transport Competition Regulations 1999* (PTCR).

From the perspective of bus operators, the key changes to the existing regulatory requirements that will occur once the Act and the proposed regulations come into effect are as follows:

- all bus operators will be subject to explicit safety duties;
- the requirement to be accredited will be restricted primarily to commercial operators, with non-commercial operators being eligible to move to a new, less onerous, "registered operator" status;
- buses with 10 to12 seats will be brought within the regulatory regime for the first time; and
- it will no longer be necessary to renew operator accreditation.

The fees established under the proposed regulations are essentially unchanged from those which currently apply. The fee for an application for accreditation is 40 fee units. The annual accreditation fee is:

5·5 fee units × (B – 1)) + 20 fee units

where B is the number of buses proposed to be operated by the service.

Table S1, below, summarises the expected costs of the proposed regulations. The table summarises these costs from three different perspectives. The first is that of the gross cost of the regulations and incorporates costings of requirements that are, at least in part, set out in the Act itself. The second perspective is that of the incremental costs of the proposed regulations, when compared with the continuation of the current legislative and regulatory requirements in respect of bus safety. The third perspective is that of the incremental costs of the proposed regulations when measured against a base case in which the BSA exists but no specific regulations are made.

Table S1: Summary of identified costs

Item	**Gross cost (PV over 10 years)**	**Incremental cost (current regs)**	**Incremental cost (unreg. base case)**
Devices for school buses	Zero or near zero	Zero or near zero	Zero or near zero
MIS and MMS	$16.5 million	- $7.8 million	$16.5 million
Accreditation applications (incl. renewals)	$3.4 million	-$1.1 million	Zero
Retention of records	Zero or near zero	Zero	Zero or near zero
Applications for registration	$0.2 million	$0.2 million	Zero
Annual bus inspections	$38.9 million	$9.3 million	$8.8 million
Notification/investigation of incidents	Near zero	Zero	Near zero
Costs to government	$20.0 million	Zero	Zero
Total	**$79.0 million**	**$0.6 million**	**$25.3 million**

The gross costs identified in respect of the proposed regulations are significant, at $79.0 million in present value terms over 10 years. However, the majority of these costs are appropriately attributed to the Act itself, rather than the regulations. In particular, $38.9 million of the identified costs relate to annual bus inspections. However, the Act requires that all buses operated by accredited operators be inspected either annually, or as prescribed in the regulations. Therefore, even were the regulations to be silent on this matter, an annual inspection requirement would still exist in respect of most buses. The extension of the Act's requirement to cover buses operated by registered operators is estimated to impose additional costs of $8.8 million over 10 years.

Moreover, $20.0 million (more than 25%) of the identified costs of the proposed regulations are incurred by government in carrying out its regulatory responsibilities, while accreditation fees are expected to recover only around one quarter of this total cost. Thus, a significant proportion of the gross costs of the regulations (amounting to almost $15 million over 10 years) are borne by government, rather than by the bus industry.

The costs of the proposed regulations, measured against a base case in which the Act comes into effect but no specific regulations are made, have been estimated at $25.3 million in present value terms over 10 years, or approximately $3.0 million per annum. These incremental costs are composed of $16.5 million in costs relating to the requirement for accredited operators to develop and maintain MIS and MMS and the additional $8.8 million in inspection costs for buses operated by registered operators, as noted above.

However, from the perspective of regulated parties, the key concern is arguably the question of how the costs of the proposed regulatory arrangements compare with those of the current regulatory requirements. Taking this perspective, the expected change in regulatory costs as a result of the implementation of the proposed Act and regulations is a slight increase in existing costs, totalling $0.6 million in present value terms over 10 years. This is the net result derived from two significant regulatory changes. First, the Act narrows the scope of the current accreditation requirement, reducing costs for non-commercial operators by creating a less onerous category of "registered operator". Second, the Act expands the definition of a bus so that 10 to 12 seat vehicles are, for the first time, regulated as buses. This means that the operators of 5,500 vehicles that fall within this category will be subject to regulation for the first time and, most notably, the requirement for these vehicles to undergo annual safety inspections. It should also be noted, however, that the new accreditation scheme established by the Act will be slightly less burdensome than the current requirements in that undertaking a training course will no longer be a mandatory prerequisite for accreditation.

There is an expected increase of approximately 29%, or $1.1 million per annum ($8.8 million over 10 years in PV terms) in the cost of bus inspections under the proposed regulations, by comparison with the current arrangements. This increase is entirely due to the impact of the change in the definition of a bus contained in the Act. As noted above, approximately 5,500 vehicles are believed to be affected[1], with more than 3000 of these vehicles being owned by

[1] This may constitute an over estimate of the number of vehicles affected, since it is based on unadjusted VicRoads registration data. PTSV believes that a significant proportion of this total number of 10 to 12 seat buses recorded in the registration statistics may not be operating as buses but, rather, have been converted to other uses via the removal of the passenger seating. However, it has not been possible to obtain a reliable estimate of the number of vehicles that may fall into this category.

operators who each own only one such vehicle, most or all of whom are believed to be non-commercial operators.

However, the average inspection cost of this class of vehicle has been estimated above as constituting a cash cost of only $100, together with staff time associated with presenting the bus for inspection, which has been estimated at 2.2 hours on average. Given this, this additional regulatory burden is believed to be reasonable and appropriate in the context of the important contribution which regular vehicle inspections is believed to make to the achievement of a high level of bus safety.

Question for Stakeholders: *Your views are particularly sought on the question of whether the imposition of this inspection requirement on very small scale registered operators would result in any undue burden on this group.*

The expected benefits of the proposed regulations can be considered from two, distinct perspectives. Firstly, the maintenance of an effective regime of safety regulation is considered to be essential to the maintenance of the high standard of safety performance currently being achieved in the bus industry in Victoria. Bus travel is the safest mode of road travel and the safety performance of the Victorian (and Australian) bus industry compares extremely well internationally. The safety performance of the bus industry has improved substantially in recent decades, in line with improvements in road safety generally. This improved performance has occurred in the context of significant developments in regulatory standards and approaches, notably including the implementation of accreditation requirements of bus operators over the past decade.

In this context, it is believed that improved bus safety regulation has been a significant contributor to the improved safety performance observed in the industry in recent times. Thus, the maintenance of the substance of the current regulatory arrangements is considered essential to ensuring that recent safety gains are maintained over time. The proposed regulations will replace the PTCR, which are due to sunset on 31 December 2010.

Secondly, the proposed regulations are required in order to ensure the effective implementation of the Act. As noted above, the Act makes a number of substantial improvements to existing regulatory requirements in respect of bus safety, including expansion of the coverage of safety regulation to smaller buses and the adoption of a more proportionate regulatory approach to non-commercial operators. The adoption of the proposed regulations will facilitate the implementation of the Act and, hence, the achievement of the additional benefits available due to the regulatory improvements that it contains.

It has not proved possible to quantify the expected benefits of the proposed regulations. However, it has been estimated that the average value of fatalities and injuries due to bus related accidents occurring in Victoria is approximately $69.54 million per annum. This estimate can be compared with the above estimates of the costs of the proposed regulations in two ways.

Firstly, it can be noted that the proposed regulations exhibit a substantial degree of similarity to the existing regulations in this area. Thus, while the average annual cost of implementing the regulations (compared with a situation in which the Act comes into effect without explicit

regulations being made) has been estimated at approximately $3.0 million, the incremental costs of implementing the proposed regulations are near zero, as noted above[2]. Therefore, the proposed regulations can be expected to yield a net benefit by comparison with the existing regulations given only a very small scale improvement in bus safety performance from current levels.

This outcome is considered to be very likely, particularly as, for the first time, 10 - 12 seat minibuses will be subject to the requirements of the regulatory system, including annual safety inspections. Given that there are more than 5,500 buses in this category, compared with 7,740 buses currently subject to regulation this change is, in fact, expected to deliver important benefits.

That said, it must be noted that data limitations prevent any clear conclusions being drawn as to be current safety performance of the minibus sector vis-a-vis the larger bus industry. In particular, while data on the number of accidents, injuries and fatalities arising from the use of minibuses is available, data on load factors and distances travelled are not available. In the absence of this data is not possible to calculate comparative accident rates and, therefore, to draw conclusions about safety performance.

In the absence of such relative safety performance data, a significant element of uncertainty necessarily exists as to the likely impact of subjecting the minibus sector to regulatory requirements such as those that have long been applied to larger buses.

The second perspective on the above data relates to the question of whether the regulations, taken as a whole, are likely to yield net benefits to society. In this context, the overall costs of the proposed regulations are relevant. The relevant breakeven calculus is that of whether, in the absence of these regulations, it is probable that the cost of bus related accidents would be at least $3.0 million higher than is currently the case. Given that the "baseline" cost figure is currently $34.77million, this would imply an increase in the accident related costs of $3.0 million/$34.77 million = 8.6%.

That is, the proposed regulations will have a net benefit if it is believed that, in the absence of these regulatory requirements, industry safety performance would be likely to decline by more than or equal to 8.6%. As noted in section 3, below, very substantial improvements in bus safety performance have occurred in recent decades. These have been associated with very significant regulatory changes, occurring over the same period. In this context, the Department of Transport believes that, in the absence of the proposed regulations, the average cost of bus related accidents would be likely to be at least 8.6% higher than is currently the case. Therefore, the Department believes that the proposed regulations, taken as a whole, will confer net benefits on society as a whole.

Finally, it should be emphasised that the above estimate of the cost of bus related accidents inevitably constitutes an under estimate, for two reasons. Firstly, it does not take into account the costs associated with "non-serious" injuries occurring as a result bus related accidents. Second, it does not take into account the costs of property damage occurring as a result of these accidents. Data that would enable quantitative estimates of these costs to be developed are not currently available. However, it is clear that, to the extent that bus related accidents

[2] The incremental costs of the proposed regulations (compared with a base case of adopting the Bus Safety Act without making explicit regulations) were estimated at $25.3 million in present value terms over 10 years. This is equivalent to an average annual cost of approximately $3.0 million.

impose costs in addition to those estimated above, the likelihood that regulatory interventions to reduce those accidents will yield net benefits to society is further increased.

The proposed regulations have been assessed in the context of four identified feasible alternatives. The first of these differs from the proposed regulations in that it would involve the adoption of a random or a targeted inspection regime, rather than a requirement for an annual inspection of each bus as under the proposed regulations. The second alternative differs from the proposed regulations in that a lesser frequency of inspection would be required for buses operated by registered operators. The third alternative differs from the proposed regulations in that it would retain the current requirement for five-yearly renewal of accreditation by operators. Finally, the fourth alternative differs from the proposed regulations only in that it would adopt full cost recovery based fees for accredited operators.

The proposed regulations and the first three of these alternatives have been assessed comparatively using a multi-criteria analysis. Three assessment criteria were identified. These were regulatory effectiveness, cost minimisation and the practicability of implementation of each alternative. Table S1, below, summarises the assessments made of each of the alternatives against each of these criteria. As indicated in the table, the proposed regulations receive the highest score, five points, while alternative two, which differs from the proposed regulations in requiring a reduced inspection frequency for buses operated by registered operators scores next highest with four points. Option three, involving retention of the existing requirements of renewal of accreditation scores three points, while option one, involving adopting randomly targeted inspections, scores zero points. Thus, the proposed regulations are preferred to the identified alternatives. It must be noted, however, that alternative 2, involving a reduced frequency of bus inspections for registered operators, receives a score that is very close to that of the proposed regulations. Hence, this outcome is necessarily sensitive to the specific assumptions adopted in undertaking the scoring.

In particular, it has been assumed that the lower overall number of inspections to be conducted under a random or targeted regime may lead to some concerns on the part of the public about reduced regulatory standards, and that there would be practical difficulties in implementing a random inspection regime without disrupting bus operations and imposing significant costs in terms of commercial losses and inconvenience for customers. This issue is discussed in detail in the body of the RIS, particularly at Section 8.

Table S2: multi-criteria analysis of regulatory alternatives

	Proposed regulations	**Random or targeted inspections**	**Reduced inspections for registered operators**	**Renewal of accreditation**
Regulatory effectiveness	2	2	1	2
Cost minimisation	-2	-1	-1	-4
Practicability of implementation	5	-1	4	-3
Total	**5**	**0**	**4**	**1**

The fourth alternative, of adopting full cost recovery based fees, was assessed against the proposed regulations in qualitative terms, given that it was not amenable to assessment in terms of the criteria identified above.

Currently, there are two fees payable in relation to accreditation: an application fee and an annual accreditation fee. There are two tiers of these fees. The first tier applies to operators of courtesy services, hire and drive services and private services. The second tier applies to road transport passenger services, which are commercial services.

The application fee for the first tier is 23.5 fee units. The annual accreditation fee for the first tier is 3·5 fee units × (B –
1)) + 13·5 fee units—where B is the number of buses proposed to be operated by the service.

The application fee for the second tier is 40 fee units. The annual accreditation fee is 5·5 fee units × (B – 1)) + 20 fee units—where B is the number of buses proposed to be operated by the service.

There will be two effective changes to this fee structure under the proposed regulations. The first is that the majority of services to which the current first tier fees apply will no longer be required to be accredited. Of this group, only commercial courtesy services will require accreditation. The remainder will only require registration, for which no fees are payable. The second change is that the first tier of fees has been removed and all accredited operators will be subject to the current second tier of fees. However, the second tier fees will not increase.

Thus, a small operator with five buses will pay an annual accreditation fee equal to 42 fee units, while a large operator with 100 buses will pay a fee equal to 569 fee units. As the current (2009/10) value of a fee unit is $11.69, these fees are equal to $490.98 and $6651.61 respectively.

Accredited operators may notice small increases in fees payable to the extent that they operate 10 to 12 seat buses, as these will be counted as buses for the first time. Non-commercial operators who moved to registered operator status will no longer be charged fees and will therefore reap significant cost savings.

There will be an increase in fees payable for operators of commercial courtesy services, since this group will henceforth pay fees equivalent to the former "tier 2" fees, where they have until now had "tier 1" fees. Conversely, fees have been removed for operators of non-commercial courtesy services, hire and drive services and private and community bus services. The net result of these changes is that expected fee revenue will decline from the current $0.7 million per annum to $0.6 million per annum. This is equal to slightly more than 25% of the annual regulatory cost of $2.3 million.

There is, by virtue of the DTF Cost Recovery Guidelines, an initial presumption in favour of adopting regulatory fees that recover fully the cost of regulatory administration. However, in the specific case of the bus industry, it was noted that the majority of the additional fee revenue that would be obtained through the adoption of full cost recovery based fees would ultimately be likely to be paid by the government itself, as a result of the terms of the contracts in place between route bus operators and the government. This would mean that the

practical benefit of moving to full cost recovery based fees would be relatively small. A related point is that government already accepts the case for providing substantial subsidies to ensure the provision of route bus services at adequate levels.

Moreover, most of those operators who would be unable to recover the cost to them of the fee increases would be smaller operators. This suggests that there would be distributive concerns associated with a move to full cost recovery based fees. This concern is heightened by the fact that fees based on full cost recovery would be almost four times as large as the current and proposed fees.

Finally, given the significant external benefits associated with the promotion of the bus industry, in terms of the diversion of demand away from private transport and consequent reductions in pollution and congestion, it is considered reasonable to accept the small degree of implicit subsidy that follows from the continuation of fees at less than full cost recovery levels.

Given the above factors, the proposed regulations are preferred to the alternative of adopting full cost recovery based fees.

Question for stakeholders: comment is particularly sought on your views of the continued appropriateness of the above fee structure.

Contents

1. Introduction

In recent years, the Victorian Government has embarked on a major program of reform of transport policy and legislation– the Transport Legislation Review – aimed at achieving best practice settings for the State. The new regulatory framework for bus safety forms part of this review and evolved from an extensive stakeholder consultation and policy development process stretching over several years.

The Act brings together a range of existing regulatory provisions in relation to bus safety into a single, dedicated statute for the first time. It also updates and improves existing regulatory arrangements by incorporating a range of features of modern, best-practice safety legislation, including explicit, performance oriented safety duties, a chain of responsibility approach to safety and the adoption of a comprehensive range of appropriate sanctions.

In addition, the Act responds to the rapid recent growth of the small (i.e. 10-12 seat) bus sector by expanding the definition of a bus to include all vehicles with more than 9 seats, including the driver's (rather than vehicles with more than 12 seats, as at present). This change ensures that all vehicles providing bus services are brought within the ambit of bus safety legislation and also harmonises the definition of a bus used in Victorian bus safety legislation with that used in the Australian Design Rules and the current Road Safety (Vehicles) Regulations.

At the same time, the Act better focuses regulatory activity by providing for reduced regulatory burdens for currently accredited non-commercial bus operators. This group, comprising a range of community groups, welfare organizations and the like, will be able to apply for exemption from accreditation. If exemption is granted, they will become registered operators and subject to less demanding regulatory requirements. Significant regulatory cost savings will result from this change.

The Act will commence on 31 December 2010. This delay in commencement of the new legislation will ensure that adequate time is available for both industry and bus safety regulators to prepare for the adoption of the new safety regime. The proposed Regulations will give effect to several major elements of the new legislative structure governing bus safety. The regulations will commence at the same time as the Act.

Public Transport Competition Regulations 1999

The need to delay commencement of the new legislative structure until 31 December 2010 in order to allow for adequate consultation and preparation for the new requirements by stakeholders necessitates some transitional arrangements being adopted in respect of aspects of the existing regulatory arrangements. Specifically, the *Public Transport Competition Regulations 1999* were scheduled to be automatically repealed (i.e. to "sunset") on 24 May 2010 as a result of the operation of the **Subordinate Legislation Act 1994**. These regulations set out requirements in relation to accreditation of bus operators, as well as a range of related matters.

In order to ensure the continuity of the existing regulatory structure pending the commencement of the new arrangements, the **Public Transport Competition Act 1995** was amended by the **Transport Legislation Amendment (Compliance, Enforcement and Regulation) Act 2010** to extend the operation of the *Public Transport Competition Regulations 1999* until the commencement of the proposed Bus Safety Regulations.

2. Objectives of the proposed regulations

The primary objective of the proposed *Bus Safety Regulations 2010* is to provide for the safer operation of the bus industry in Victoria by giving effect to key provisions of the Act. Improved safety is expected to be reflected in reduced accident rates and in consequent reductions in the number of fatalities, serious injuries, non-serious injuries and property damage to buses, other vehicles and the assets of third parties in the context of bus related accidents.

Other, secondary objectives of the proposed regulations are:

- To minimise regulatory costs, consistent with the achievement of improved safety performance; and
- To ensure that the bus industry makes a reasonable contribution to the regulatory costs incurred by the government, through the specification of a range of relevant fees, structured to reflect the capacity to pay of different operators.

3. Nature and extent of the problem

3.1. Market failure issues and bus safety regulation

A fundamental rationale for regulation is that of market failure. Two basic forms of market failure can be identified in relation to the bus industry: those of information asymmetry and externalities. These are discussed in turn below

Information asymmetry

Information asymmetry arises because individual consumers are generally poorly placed to inform themselves as to the safety performance of a bus service that they are considering using: they have no way of determining the skills and fitness of the driver and no way of assessing the quality and maintenance history of the vehicle. In addition, while persons hiring charter and tourist bus services have the opportunity to choose between different providers, this is not the case where scheduled route bus services are concerned. These issues mean that demand pressures from consumers will not, themselves provide adequate incentives for providers of bus services to ensure optimal safety performance.

In relation to scheduled route bus services, the government can be seen as acting as the agent of the consumer, since all such services must be provided pursuant to service contracts which are concluded between the operator and the government. Clearly, government is substantially better placed than individual consumers to inform itself as to the safety performance of competing suppliers of bus services. Thus, the information asymmetry issue is somewhat attenuated in this context. However, it remains a substantial consideration, given that the low absolute number of bus accidents and incidents (a corollary of the generally high level of safety performance of this transport mode) means that reliable *ex post* assessment of the safety performance of individual operators is extremely difficult to achieve.

The issues of information asymmetry are, however, likely to be less substantial in some sectors: in particular, users of buses in the community sector are likely to know personally the drivers of the bus and, potentially, those responsible for its maintenance. This would allow them some opportunity to make judgements about the probable degree of safety of the service. Moreover, the fact that users are generally part of the same community group means that there is inevitably a greater incentive on the part of those providing bus services to ensure high levels of safety. Users may therefore feel that they require a lesser degree of information in order to be confident to make use of these services.

Box 1: Bus operators types

Scheduled route bus service operators

Bus operations providing regular services to the public along defined routes. Provided subject to service agreements with the government and generally subject to limited exclusivity arrangements.

Charter service operators

Bus operations involving the hire of a bus to an organisation or group which specifies the route to be taken. This includes school bus services where the school hire the bus service, rather than owning the bus themselves.

School operators

Numerous schools operate buses that they own, using them to transport students.

Community groups

Community groups of various kinds own and operate buses. These include sporting clubs, service organisations and welfare bodies (e.g. providers of supported accommodation services).

Tourist operators

Providers of tourist services frequently operate buses to provide tours of places of interest to tourist groups.

Accommodation providers

Many hotels, backpacker hostels and other accommodation providers use courtesy buses to provide limited transport services to customers, usually without charge. These can include airport or railway terminus pick-up and drop-off services, for example.

Other service providers

Hotels, country clubs and the like, particularly in non-metropolitan areas, may provide shuttle bus services to patrons.

Externalities

The issue of externalities arises in relation to all modes of road transport. That is, unsafe behaviour on the part of one road user potentially compromises the safety of all other road users. This issue can be considered to be particularly relevant to bus transport, in that the majority of fatalities and injuries caused in bus related accidents occur to persons other than

bus occupants (i.e., users of bus services). This means that, even if bus service providers faced appropriate signals from consumers in relation to the provision of safe services, safety incentives would still be inadequate. The existence of community rated insurance in respect of personal injuries, combined with a predominantly "no fault" compensation system, means that providers do not fully perceive the financial costs of poor safety performance.

All of these factors provide a potential case for regulation. However, a number of other factors must also be considered. In particular, it was noted above that scheduled route bus services are provided in Victoria only subject to government contracts. Contracted providers receive government subsidies in respect of service provision. In this context, the possibility clearly exists for government to implement safety standards in respect of route bus services at least by contractual means: that is, detailed safety related requirements could be written into service provision standards. Since the majority of bus services are scheduled route services, this could be seen as a potentially feasible means of meeting many of the above concerns: the government in such a scenario would effectively act as agent for both the direct consumers of bus services and for other road users.

However, there are several problems with this scenario. First, including all relevant safety matters in contracts would introduce substantial and, arguably, unmanageable complexity to the contracting relationship. Second, there would be a lack of transparency as to safety-related requirements, yielding concern among the public about whether these requirements were sufficiently robust and whether consistent standards were being applied. Third, government is unable to adopt this approach in relation to sectors of the industry other than the scheduled route service sector with which it contracts directly, and parts of the charter bus sector, with which it contracts via schools and other government institutions.

Intrinsic incentives for sound safety performance can be identified in relation to many sectors of the industry. In particular, providers in the charter and tourist sectors face reputational risks if their services suffer from poor safety performance. These risks could be seen to motivate them to ensure appropriate levels of safety. However, in practice, these incentives are likely to be insufficiently strong. Tourists from outside Victoria (and, especially, from outside Australia) are unlikely to have a strong awareness of the safety performance of different providers. More generally, the relatively low level of bus-related accidents generally means that it will be difficult in practice to discern which providers have better and worse performance standards.

It can also be noted that other regulatory arrangements affect the safety of bus operations in Victoria. General road safety legislation affects the design of buses, driver standards (through licensing) and their conduct on the road. Occupational health and safety legislation affects buses as workplaces. However, these other legislative requirements have only a partial coverage of the broad range of factors that determine overall bus safety performance.

Given the difficulties enumerated above in relation to other, potential means of addressing market failure and externality issues, governments have invariably preferred to regulate the bus industry. Regulation has the clear advantage, vis-à-vis the options cited above, of allowing consistent standards to be applied across the sector, with such differentiation as occurs being based on rational, safety-related factors such as risk profile. It also guarantees transparency and, as a result, public confidence in the industry. This is of particular importance in the context of current government policies in favour of increasing the role of

public, vs private, transport and the particular prominence that has been accorded to the bus industry within this wider public transport context.

3.2. Bus safety performance in Victoria

Bus transport is, in comparative terms, a safe mode of road transport: bus-related fatalities and injuries comprise only an extremely small proportion of the overall road toll. According to data from the Australian Transport Safety Bureau, Australia-wide, there were between 20 and 37 bus-related fatalities a year over the decade to 2008, with an annual average of 28.5 bus-related fatalities over the period. In Victoria, over the same period, there were between 2 and 7 bus-related fatalities a year. Total fatalities in Victoria in the decade to 2008 were 45, equivalent to an average of 4.5 fatalities a year. In 2008, the 22 bus-related fatalities recorded nationally was equivalent to 1.5% of all road fatalities for the year.[3]

Table 3.1, below, gives a breakdown of bus-related fatalities by road-user type. It shows that bus occupants account for only around 31% of bus-related fatalities, with other vehicle occupants accounting for a further 33% and pedestrians for most of the remainder. Similar proportions are observed in respect of bus-related injuries.

Table 3.1: Bus-related fatalities by road user type, 1990–1997[4]

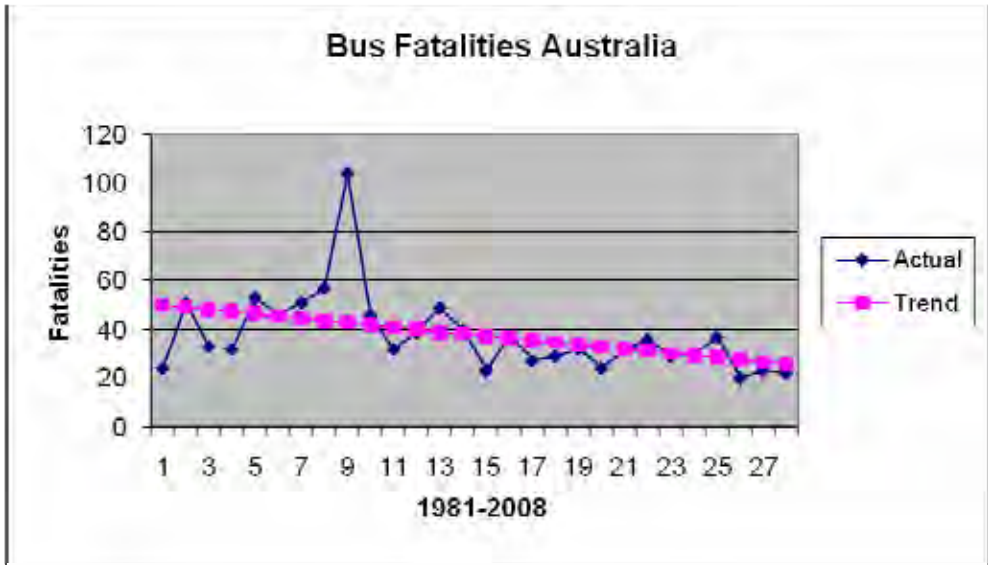
Road user type	**Number**	**Percentage**
Bus occupants	92	30.7%
Other vehicle occupants	99	33.0%
Pedestrians (entering/exiting bus)	1	0.3%
Other pedestrians	77	25.7%
Other/unknown	31	10.3%
Total	**300**	**100.0%**

Source: ATSB (2001) *Australian Bus Safety*, p1.

Longer term bus safety statistics demonstrate a clear improvement in safety performance over time, as demonstrated by Graph 3.1, below. Graph 3.1 shows a gradual decline in the number of bus-related fatalities in the 27 years from 1981 to 2008. Other data published by ATSB demonstrate a similar decline in bus related injury numbers, as would be expected.

[3] ATSB (2009) *Road Deaths Australia 2008: Statistical Summary*. Pp 33 & 39.
[4] While this data is relatively dated, *Australian Bus Safety 2001* remains the most recent available source of detailed data on bus related fatalities.

Graph 3.1: Australian Bus Fatalities 1981 - 2008



At the same time, there has been a steady increase in the number of vehicle kilometres travelled by bus. According to the ABS, the total number of vehicle kilometres travelled by bus increased from 1,433 million in 1988 to 2,097 million in 2007. This represents an increase of 664 million kilometres, or 46.3%, over this period. Thus, the number of fatalities, calculated on a per million vehicle kilometres travelled basis, has declined substantially over the period. Comparison of the trend number of fatalities[5] between 1988 and 2007 indicates a decline of around 40% over the same period. Thus, the number of fatalities per vehicle kilometre has declined by approximately 58.9% from 1988 to 2007 in trend terms[6].

Comparison with data on broader road safety trends indicates that the improvement in fatality rates observed in relation to buses is very similar to that observed for motor vehicles generally: according to ATSB[7], the overall number of fatalities per hundred million vehicle kilometres travelled declined from 1.88 in 1988 to 0.74 in 2007. This represents a decline of 60.6%.

These very substantial improvements in safety performance have occurred in the context of very substantial changes in the regulatory context for the operation of both buses and road vehicles more generally. Regulatory standards have become more stringent in a wide range of areas, while the scope of regulatory intervention in relation to road vehicles and road users has also expanded considerably. As a result, it is generally believed that regulatory action by

[5] Trend fatality figures are used due to the highly volatile nature of the "actual" data - i.e. the tendency for fatality numbers to vary widely from year to year.

[6] Using trend data, 1988 fatality rate = 43.6 fatalities/1,433 million vehicle km = 3.04 fatalities/100 million vehicle km. 2007 fatality rate = 26.3 fatalities/2,097 million vehicle km = 1.25 fatalities/100 million vehicle km. Reduction in fatality rate = (3.04 – 1.25)/3.04 = 1.79/3.04 = 58.9%. See ABS Cat. 9210.0 *Survey of Motor Vehicle Use.* Data from 2007 is the most recent currently available (as at January 2010)..

[7] ATSB (2009), p 13

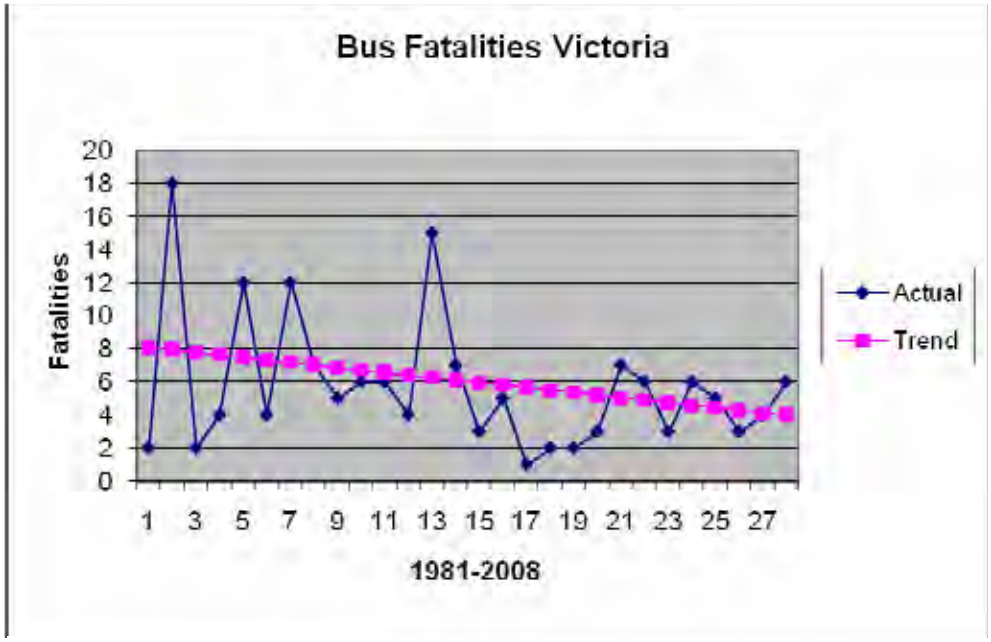
governments has played an extremely influential role in improving overall road safety performance.

Given the significant changes that have occurred in the bus safety regulation over the relevant period, it is also considered that regulatory improvements constitute an important one of three factors in the observed improvement in bus safety. Key regulatory improvements in recent decades include more rigorous vehicle standards being adopted and the implementation of bus operator accreditation, embracing regulatory requirements for both the auditing of bus operations and the annual inspection of all buses.

Bus safety in Victoria

Graph 3.2 demonstrates that Victoria's bus safety performance shows a similar trend to that exhibited nationally. The same clear downward trend in fatality numbers is visible, notwithstanding the greater degree of volatility in fatality numbers that is also evident in the graph. This observation of apparently greater volatility reflects the fact that the absolute numbers of bus fatalities and, similarly, the number of fatal, bus related accidents, is extremely small (varying from 18 to one over the period covered by the graph and being seven or fewer in all but four years). This necessarily means that small changes in the absolute number of fatalities occurring from year to year due to random factors have large proportionate impacts.

Graph 3.2: Victorian Bus Fatalities: 1981 - 2008



In the 10 years to 2008, there were 45 bus-related fatalities in Victoria and 285 Australia-wide. Victoria, therefore, accounted for 15.8% of national bus fatalities over this period, while it accounted for approximately 20.6% of total bus kilometres travelled[8]. This indicates that the average fatality rate in Victoria, per million bus kilometres travelled, was somewhat below the national fatality rate over this period.

Inter-modal comparisons

In addition to accounting for only a very small proportion of total road accident fatalities and injuries, bus travel is extremely safe by comparison with other modes of road transport. Table 3.2, below, compares fatality and injury rates per 100 million passenger kilometres across the various road transport modes. It shows that bus travel is the safest of the modes included in the table. For example, fatality rates are less than one eighth of those experienced for private car travel.

[8] Data on km travelled relate to 2007 (See ABS 9210.0). Victorian buses travelled an estimated 433 million km , while buses across Australia travelled 2,097 million km.

Table 3.2: Comparative fatality and injury rates: road transport modes[9]

	Fatalities				Hospitalisations			
	1994		1997		1994		1997	
Vehicle type	*Number*	*Rate*	*Number*	*Rate*	*Number*	*Rate*	*Number*	*Rate*
Passenger car	1201	0.58	1099	0.49	14,490	6.94	14,515	6.43
Rigid truck	46	0.57	49	0.60	453	5.61	376	4.57
Articulated truck	30	0.65	39	0.78	230	4.98	194	3.89
Bus	20	0.12	11	0.06	139	0.84	85	0.47
Motorcycle	182	11.93	177	10.38	2738	170.07	2529	148.34

Source: *Australian Bus Safety*. ATSB, 2001, p 19.

International comparisons

The major source of international comparisons of Australia's bus safety performance identified via a literature review undertaken is a 2002 paper by Hildebrand and Rose[10] that compares Australia's bus safety performance with that of the United States and Canada. The authors find that Australia's safety performance compares favourably with that observed in North America.

Table 3.3, below, compares total road fatality rates and bus-related fatality rates for Australia, Canada, the United States and the OECD median. It shows that the Australian bus-related fatality rate, per 100 million bus kilometres travelled, is less than half that recorded in the United States and Canada. The fact that the number of fatalities per million people is higher in Australia than in either the United States or Canada reflects the fact that the average amount of bus travel undertaken per person is much higher in Australia than in either Canada or the United States.

Table 3.3: Comparative bus-related fatality rates (annual average 1994–1996)

	Australia	**US**	**Canada**
Bus-related fatalities	34	340	50
Bus occupant fatalities	11	28	5
Fatalities per million people	1.84	1.28	1.65
Fatalities per 100 million bus kilometres	1.49	3.35	3.10
Bus occupant fatalities per million people	0.58	0.11	0.18

Source: Derived from Hildebrand and Rose (2002).[11]

[9] While this table is based on data from the 1990s, no more up to date comparisons have subsequently been published.
[10] Hildebrand, E and Rose, G (2002), *Benchmarking Australian Bus Safety*, Road and Transport Research, March 2002 (published by the Australian Roads Research Board)
[11] Hildebrand and Rose (2002), Table 2 (p 54) and Table 4 (p56)

This observation, of much lower numbers of bus-related fatalities per vehicle kilometre, occurs against the background of very similar overall road fatality rates. Average annual fatality rates for all road transport modes over the relevant period were 1.17 per 100 million vehicle kilometres in Australia, compared with 1.11 in Canada and 1.10 in the United States.

The Hildebrand and Rose data indicate that Australia's bus safety performance is good relative to two clearly comparable countries. As the above has also demonstrated that Victorian bus safety performance is probably somewhat superior to that of Australia as a whole, it is clear that Victorian bus safety performance is also strong by international standards. While the data used in Hildebrand and Rose are now somewhat dated, the clear improving trend in bus safety performance since the mid 1990s that is demonstrated in graphs 1 and 2 indicates clearly that Victorian bus safety performance has continued to be strong.

Thus, the context for the Act and the proposed regulations is not one of major concerns over safety performance. The current degree of stringency of bus safety regulation is considered to be broadly appropriate. Rather, the focus of the reform will be one of updating and improving the regulatory system to ensure that it is able to continue to underpin and support strong bus safety performance in the future, as well as responding appropriately to the rapid growth in the size of the bus fleet (particularly in relation to smaller buses) that has occurred in recent years and that is expected to continue in the medium term.

Safety performance across the bus industry

The change in the definition of a bus implemented via the Act will effectively result in a substantial increase in the number of buses that fall within the ambit of the bus safety regulatory regime, from fewer than 8,000 at present, to more than 13,000. This broadening in the definition of a bus occurred in part in order to address previous inconsistencies in the definition of a bus in different pieces of legislation and regulation. It also recognised the fact that the minibus sector has become by far the fastest growing part of the bus fleet in recent years and that, as a consequence, it was increasingly untenable to allow this rapidly increasing proportion of the bus fleet to remain outside the ambit of bus safety regulation. In addition, a number of stakeholders argued strongly that the safety performance of minibuses was, or was likely to be, poorer than that of the large, commercial bus sector.

There is limited evidence on the question of whether minibuses are currently over-represented in terms of bus-related accidents. A key data limitation is that published ATSB data do not provide specific information in relation to minibuses. On the other hand, the VicRoads "CrashStats" database does provide separate data for buses and minibuses. Table 3.4, below, summarises this data for the most recent five-year period.

Table 3.4: Fatal and high-severity accidents involving buses, Jan 2004 - Dec 2008

	Fatal accidents	**High severity accidents**
Buses	18	228
Minibuses	4	69

Source: VicRoads

Table 3.4 shows that minibuses were involved in 4 fatal accidents over this five year period and 69 high severity accidents. The latter is defined as an accident which results in a death and/or serious injury. However, the definition of a minibus used by VicRoads is a vehicle with between 9 and 13 seats. Buses with 10-12 seats therefore constitute only a subset of this group. If it is assumed that the numbers of buses are randomly distributed in terms of seat numbers within this range, it would be expected that 10-12 seaters would constitute 60% of the minibus total as defined by VicRoads. If it is also assumed that their accident history is as per the average of the larger "minibus" group, this suggests that 60% of the above accidents are likely to have involved 10-12 seat buses.

This implies a total of 1.8 fatal accidents over five years and 41.4 high severity accidents. Over the same period, there were 19 fatal accidents involving buses and 241 high severity accidents. These figures can be compared with the number of vehicles in each category to obtain comparative accident rates.

Table 3.5: Comparison of accident rates for bus types, Jan 2004 - Dec 2008

	Buses (13+ seats)	**10-12 seaters**
Fleet number (approx 2006[12])	8,000	2,566
Fatal accidents (2002-07)	18	2.4
High severity accidents	228	41.4
Fatal accident rate (per 1,000 vehicles)	2.25	0.94
High severity accident rate (per 1,000 vehicles)	28.5	16.13

Table 3.5 shows that accident rates per vehicle are lower for 10-12 seat buses than for larger buses, with the fatal accident rate being less than one third as high and the high severity accident rate being little more than one half as high. This suggests, *a priori,* that 10-12 seat buses, despite being currently unregulated for the most part, are actually safer than larger buses.

However, a number of factors potentially modify this conclusion. First, it is highly likely that the average distance travelled by minibuses is well below that travelled by larger buses. This reflects the likely predominant uses of each vehicle category. Thus, data presented in the previous section indicated that there were 3,099 operators of only a single 10-12 seat bus. These operators are likely to be non-commercial in nature and to operate the bus as an ancillary to their main activities. Average distances are likely to be low by comparison with those covered by larger buses, most of which are owned by commercial operators and engaged in route and charter work.

To the extent that average distances are lower for 10-12 seaters, their accident rates per vehicle kilometre travelled will compare less favourably with those of larger buses than do the comparisons in the above table, which are based on accidents per vehicle. However, it is clear that average distances for the 10-12 seat bus sector would have to be substantially

[12] Sources: VicRoads, PTSV

smaller than for the large bus sector in order to confirm the proposition that the minibus sector is less safe than the large bus sector.

As noted above, several stakeholders have advanced the view that the minibus sector is, or may be, less safe than the large bus sector. As noted in the DOT Discussion Paper, the authors of the only known international comparison of Australian bus safety performance in recent years (Hildebrand and Rose (2002)) highlighted concerns with the safety performance of smaller buses. After reviewing Victorian data relating to 9 – 13 seat buses, in particular buses described as providing shuttle services, they found:

> *high involvement of mini-buses in injury accidents…[I]ntuitively, it seems that mini-buses are overrepresented in serious and other injury accidents.*

However, it must be noted that no specific data analysis is included in the Hildebrand and Rose paper, while they explicitly qualify their view, also stating that it is "intuitive" in basis.

A National Transport Commission policy paper entitled "*Improving Safety Management in Australia's Bus Industry*" was released in June 2008 and briefly addresses this issue. The NTC paper states:

> *"Several road agencies noted concerns about the safety records of operators of small buses. It is common among jurisdictions for the small bus industry to be less regulated than the large commercial bus industry. Most existing accreditation schemes apply to buses of 12 seats and over (the exact number differs slightly from state to state), leaving buses with less seats —small buses— outside of accreditation. Tourism and courtesy bus industries are rapidly expanding in some areas, and concerningly, a crash study in Victoria in the early 1990s found that the small bus industry has a higher crash rate than the large bus industry. There is also a common perception that the 'bad safety record' of smaller operators affects the reputation of the rest of the industry. (p6)"*

The reference to the Victorian crash study, while not footnoted, is clearly likely to be that to which Hildebrand and Rose also refer, given that the data analysed in their paper is from the early to mid-1990s and both authors indicate that they refer to a Victorian study. Thus, the NTC paper adds no data, but reports a common perception of a "bad safety record". NTC's substantive point appears to be that this sector is currently largely unregulated.

Concerns about the relative safety performance of the minibus sector have been expressed in a number of quarters and would further strengthen the argument for regulation if they could be confirmed by data. However, the limited available data does not currently provide any such support for these opinions.

In sum, notwithstanding uncertainty as to the actual safety performance of the sector, the recent rapid increase in the number of 10-12 seat buses, considered in light of the fact that they also transport large numbers of people, provides a clear case for including this sector within the ambit of bus regulation. This argument is further strengthened by the observation that the number of these vehicles in Victoria is now approximately two thirds that of the number of larger buses.

Commercial versus non-commercial operators

A second significant change to existing regulatory arrangements made via the Act was the creation of the category of registered operator, effectively allowing non-commercial bus operators to move to a less onerous regulatory regime than the accreditation regime that would continue to be applied to commercial operators.

The Act requires operators of commercial bus services and local bus services to be accredited. Commercial bus services are defined to include route bus services, demand responsive bus services, tour and charter bus services and courtesy bus services, where the buses used to provide the service contain 13 or more seats including the driver. Local bus services are defined as bus services provided on a regular or demand responsive basis, available to the general public free of charge, where the buses used to provide the service contain 13 or more seats including the driver.

Operators of community and private bus services, non-commercial courtesy services and hire and drive bus services are not required to be accredited, irrespective of the number of seats the buses used to provide the service contain. These operators are required to be registered. Additionally, operators of bus services which do not satisfy the definition of commercial or local bus service because the buses used to provide the service contain less than 13 seats including the driver will be required to be registered rather than accredited.

This change was made despite the absence of any quantitative data that would allow the relative risks posed by these two sectors to be compared. In the absence of such data, the decision to move in this direction was based on a number of qualitative judgements.

Firstly, while data are again unavailable, it is generally believed that the average number of kilometres travelled by a bus operated by a non-commercial operator is less than that travelled by a bus operated by a commercial operator. This reflects the fact that non-commercial operators necessarily utilise buses as an ancillary to their main area of activity, whereas a commercial operator will, in most cases, be primarily a bus operator. Non-commercial operators include schools, community groups and the like. If non-commercial operators cover significantly lower average distances and, as is also likely, have significantly lower load factors than commercial operators, then the overall level of risk posed by their operations is concomitantly lower[13]. This lower overall level of risk can be seen to justify the adoption of a less onerous regulatory regime.

Secondly, non-commercial operators have particularly strong intrinsic incentives to maintain high safety standards, since the passengers that they carry are part of a defined group with close interrelationships (e.g. in the school or sporting/community group context).

Thirdly, operators in the non-commercial sector will generally have a lesser degree of economic capacity to undertake regulatory compliance activities. Thus, any unnecessary regulatory requirements to which they are subject will prove to be particularly onerous.

[13] If risk is defined as hazard x exposure (where exposure is equal to the number of passenger kilometres travelled), then if exposure levels are lower in the non-commercial sector, then so too will be risk levels, unless the level of "hazard" (i.e. the likelihood of accidents per passenger kilometre travelled) is much greater.

Fourthly, given that their bus operations are very small scale in nature and ancillary to their normal activities, the adoption of the risk management-based approaches that underpin the accreditation concept is less likely to be effective and appropriate to their operations.

Importance of mechanical defects as a safety issue

A substantial part of bus safety regulatory regimes typically focuses on ensuring that the bus fleet meets adequate mechanical standards, both in terms of initial vehicle standards and in-service maintenance requirements. This is so despite the fact that a quite small proportion of bus accidents in Australia (as elsewhere) are typically attributed to mechanical failure. However, several points can be made in this regard.

Firstly, with bus safety regulation having a long implementation history in all jurisdictions, it is arguable that this low rate of accidents due to mechanical failure is itself a reflection of the success of these regulatory approaches. This is not a proposition that is empirically testable, but it is one which is logically plausible.

Secondly, there is some evidence to suggest that those accidents that are due to mechanical failure tend to be relatively high consequence accidents. A recent risk analysis conducted for Public Transport Safety Victoria (PTSV) reported that 15 identified incidences of brake failure leading to bus crashes between 1970 and 1993 were associated with a total of 41 fatalities in 103 serious injuries[14].

Third, while regulatory systems largely focus on mechanical standards it is considered by regulators that indirect benefits may also arise in relation to other aspects of bus operations, as focus on compliance in these areas may contribute to the development of a greater degree of "safety culture" among operators.

3.3. Cost of bus-related accidents

According to the VicRoads Crashstats database, 19 fatalities and 271 injuries resulted from accidents involving buses (including minibuses) in the five years to December 2009. This is equivalent to an average of 3.8 fatalities and 54.2 serious injuries per annum on average.

These data can be used, in conjunction with Standard estimates of the Value of a Statistical Life (VSL) in order to estimate the current costs of bus related accidents. Two literature reviews have been published in recent years which incorporate meta-analyses of the academic research on this issue of the average VSL reported in a range of research literature relevant to Australia[15]. These two meta-analyses derived VSL figures of $6.0 million (Access Economics) and $3.5 million (Abelson). As both analyses appears to be of a high methodological standard, there is no clear basis for preferring one or the other VSL figure. Consequently, a figure of $4.75 million, representing the midpoint between these two figures, has been used to calculate a "base case".

[14] ***Report for Bus Operator Auditing Program Development: Bus Risk Assessment and Audit Report.*** December 2008. Report Prepared for Public Transport Safety Victoria by GHD consultants.

[15] See Access Economics (2008) *The Health of Nations: The Value of a Statistical Life.* Report prepared for the Office of the Australian Safety and Compensation Council. Abelson, P. (2007). *Establishing a Monetary Value for Lives Saved: Issues and Controversies.* Paper prepared for the Office of Best Practice Regulation.

In assessing the cost of injuries incurred, two broad approaches are possible. First, some literature argues that serious injuries should be valued in terms that are consistent with the conceptual basis of the VSL figure used, by adopting an estimate that represents a proportion of the VSL figure. A review of sources indicates that accepted values, using this approach, are in the range of 0.20 to 0.23 times the estimated VSL[16]. The most common alternative approach is based on summing the tangible costs of an injury, including medical treatment costs, loss of income and the like, with an allowance made in some cases for the intangible costs of pain and suffering endured by the injured. These calculations of injury costs are generally less comprehensive approaches and, at least arguably, substantially understate true costs.

The former approach has been adopted for the current purposes, as it is considered methodologically preferable to adopt a consistent Willingness To Pay (WTP) approach to valuing injuries. The WTP approach is regarded as clearly superior in calculating VSL figures. Consequently, injuries are valued at 0.2 times the VSL figure adopted in the following calculations.

Given the above, the average annual cost of bus related accidents in Victoria that results in fatalities and/or serious injuries can be calculated as follows:

- Cost of fatalities = 3.8 x $4.75 million = $18.05 million
- Cost of serious injuries = 54.2 x $47.75 million x 0.2 = $51.49 million

Thus the total cost of fatalities and serious injuries ($18.05 million + $51.49 million) = $69.54 million per annum on average.

Such an estimate inevitably somewhat underestimated the cost of bus related accidents for two reasons. Firstly, it does not take into account the costs associated with "non-serious" injuries occurring as a result of bus related accidents. Second, it does not take into account the costs of property damage occurring as a result of these accidents. Data that would enable quantitative estimates of these costs to be developed are not currently available. However, it is believed that the above estimates of the costs of fatalities and serious injuries capture the largest part of the overall costs associated with bus related accidents.

3.4. Impact of bus safety legislation

It is important to note that bus safety legislation has the potential to affect only a subset of all causes of bus-related accidents. The above data includes all bus-related accidents, however, such accidents will inevitably be caused by other road users in a substantial proportion of cases. While specific bus-related data are not available, it is evident that accidents relating to any class of vehicle include those in which the vehicle and/or its operator are at fault, and those in which they are not.

Clearly, bus safety legislation can only hope to improve performance in respect of that subset of bus-related accidents in which the bus and/or the bus driver are at fault. Data on the proportion of bus-related accidents in which the bus is at fault are extremely limited. No

[16] Soby, BA., Ball, DJ. & Ives, DP. (1993). *Safety Investment and the Value of Life and Injury.* Risk Analysis, Vol. 13, No. 3, June 1993, pp 365-370.

such data has been identified that relates to Australia, notwithstanding searches of VicRoads CrashStats database and ATSB and BTRE websites. One US source identified is an analysis of safety performance by bus carrier type by Blower et al (2004)[17], from which the following table is drawn.

Table 3.6: Percentage Distribution of Crash Type By Bus Operator Type, 1999-2000

Accident type	School	Transit	Intercity	Charter	Other	Unknown	Total
Single vehicle							
Ran off road	2.1	0.0	7.1	7.6	17.2	0.0	3.3
Hit object in road	16.9	39.2	21.4	18.2	19.0	44.4	25.8
Same direction, same trafficway							
Rear-end, bus striking	1.1	1.3	3.6	10.6	1.7	5.6	2.3
Rear-end, bus struck	13.4	14.3	3.6	9.1	6.9	0.0	12.0
Sideswipe, in other's lane	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sideswipe, in bus's lane	0.7	1.3	0.0	1.5	0.0	0.0	0.9
Opposite direction, same trafficway							
Head-on, in other's lane	1.1	0.0	0.0	3.0	1.7	0.0	0.9
Head-on, in bus's lane	20.1	8.9	21.4	9.1	6.9	5.6	13.7
Sideswipe, in other's lane	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sideswipe, in bus's lane	3.5	0.8	0.0	0.0	5.2	5.6	2.3
Change trafficway, one vehicle turning							
Bus turn across path	8.5	3.4	7.1	1.5	3.4	0.0	5.4
Other turn across path	5.6	3.4	3.6	1.5	5.2	5.6	4.3
Intersecting paths, both going straight							
Bus into side of other	7.4	8.0	7.1	7.6	6.9	0.0	7.4
Other into side of bus	5.6	2.5	7.1	1.5	1.7	0.0	3.8
Other accident types							
Other	10.6	9.7	17.9	25.8	20.7	16.7	13.0
Unknown	3.5	7.2	0.0	3.0	3.4	16.7	4.9
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0
N =	284	237	28	66	58	18	691

Table 3.6 does not directly address the issue of fault. However, as the authors point out:

> *Certain crash types can indicate driver error or driver contribution to the crash. In rear-end crashes, the error leading to the crash is much more likely to have occurred in the striking vehicle than in the struck. Similarly, in head-on crashes, the vehicle crossing the centerline is much more often "at-fault" in the crash than the other vehicle. Other crash types are not so clear-cut in the absence of information on right-of-way.*

On this basis, if accidents in which the bus strikes another vehicle (same trafficway), those in which the bus is in the other vehicle's lane and those in which the bus turns across the path of the other vehicle are assessed as being the fault of the bus, together with the single vehicle accidents, a total of 37.7% of the accidents listed in Table 4 can be assessed as "bus at fault", with a further 33.2% assessed as "other vehicle at fault" and the remainder[18] unclassifiable.

[17] Blower, D., Matteson, A. & Shrank, M. (2004). *Motor Carrier Type and Factors Associated with Fatal Bus Crashes.* Federal Motor Carrier Safety Administration.
See: http://www.umtri.umich.edu/content/UMTRI_2004_20.pdf

[18] i.e. those listed as "other accident types", together with the "intersecting paths, both going straight" group.

While the above constitutes only a rough measure of the proportion of accidents in which the bus is likely to be at fault, it suggests that buses are about equally likely to be at fault as other vehicles. That is, this data, though clearly only indicative in nature, generally supports what would otherwise be an *a priori* assumption that bus at fault accidents are likely to represent only around 50% of the total number of accidents, injuries and fatalities observed.

Further, to the extent that design and construction quality of buses is a factor in overall safety performance, this too must be considered to be outside the scope of State based bus safety regulation, since these issues are essentially regulated federally through the Australian Design Rules (ADRs).

4. Summary of the proposed regulations

4.1. Bus operations

Part 2 of the proposed regulations establishes a number of safety related requirements in relation to bus operations. Bus operators are required to determine the maximum number of passengers that each of their buses can carry, by reference to either the manufacturer's compliance plate or the report of a licensed bus tester and must keep a record of this maximum number. Operators are also required to ensure that all of their buses comply with all relevant standards and with the Australian Design Rules (ADR). Exceptions to this general requirement are listed in Schedule 2 to the regulations and apply to buses manufactured before 1 July 1988. One exemption applies to all buses and states that they are not required to comply with a requirement to have a second fire extinguisher. Four other exemptions relate to buses operated by registered operators and relate to specific standard involving driver protection, passenger seats, aisles and steps. These exemptions are identical to those specified in the current regulations.

The Safety Director is also given discretion to exempt a bus from compliance with a particular standard or standards if compliance with the standard is deemed to be inappropriate in the circumstances, having regard to either the design and construction of the bus or the type of bus service being provided.

Operators are also required to ensure that school buses are fitted with complying warning lights and hazard warning devices and that these operate whenever the bus is stationary on a highway for the purposes of picking up or setting down schoolchildren. Operators are required to ensure that fire extinguishers, that are fitted to buses pursuant to the vehicle standards regime, are maintained in an operating condition.

4.2. Accreditation

Part 3 of the proposed regulations establishes a number of matters in relation to applications for accreditation. These include the application fee payable and the documentation required to be submitted as part of the application. The regulations also set out certain generally applicable conditions of accreditation. In particular, these include requirements on the operator to ensure that all buses operated comply with relevant regulations and to ensure that the operator's bus operations are audited at least annually.

Accredited operators are required to display any signage specified by the Safety Director, as well as accredited bus operator number plates. The Safety Director is required to publish details of all approved bus operator training courses.

A number of record keeping requirements applicable to accredited operators are also established. In addition, operators are required to establish and maintain both management information systems and maintenance management systems.

4.3. Registration

Part 4 of the proposed regulations establishes a number of matters in relation to applications for registration, including the materials that must be included in an application. Registered operators are required to ensure that all drivers of their buses are appropriately licensed.

4.4. Bus inspections

Part 5 provides that safety inspections of buses must be carried out annually by a licensed bus tester, with the inspections required to determine whether the bus complies with the relevant standards and with the *Road Safety (Vehicles) Regulations 2009*. The Safety Director is also able to require that a bus be inspected at any time. Licensed bus testers are required to provide the Safety Director with such information about buses that have been inspected as is requested.

4.5. Reporting and investigation

Part 6 provides that bus operators must notify the Safety Director of all bus incidents and that the Safety Director may elect to require the operator to investigate any such incidents. Where an investigation is conducted, a report must be produced and a copy provided to the Safety Director. The Safety Director is also empowered to require a more thorough investigation to be undertaken or further information to be provided. The Safety Director is also empowered to conduct his/her own investigation.

4.6. Transitional arrangements

Part 7 deals with transitional arrangements. In particular, operators accredited under the current legislation are to be deemed to be accredited under the Act, with this deemed accreditation to last for up to 5 years. A new Section 12(3) was inserted into the **Public Transport Competition Act 1995** on the passage of the Act in April 2009. Section 12(3) expressly allows for the Safety Director to extend bus operator accreditations for 2 years after the enactment (i.e. the date of Royal Assent) of the Act. This transitional arrangement was adopted in order to avoid any doubt and make it clear that all current bus operator accreditations as at the date of the BSA enactment would remain on foot until 31 December 2010, at which time the deeming provisions in the proposed Regulations will become operative.

4.7. Comparison with existing regulatory requirements

Appendix 2 contains a comparison of the existing regulatory structure governing bus safety with that which is intended to operate from 31 December 2010, encompassing both the Act and the proposed regulations. Key changes are:

- The adoption of explicit performance-based safety duties in the Act (cf current reliance on the OHS Act) and the adoption of a chain of responsibilities approach affecting key bus industry parties who can influence safety outcomes;
- Narrowing of the scope of accreditation to encompass only commercial operators;
- Establishment of the regulated category of "registered operator" for which non-commercial operators are eligible, along with commercial operators that only use 10-12 seat buses (i.e. "minibuses");
- Application of bus safety regulation to all buses with 10 or more seats (cf 13 or more seats);
- Establishment of a broader range of sanctions for non-compliance.

4.8. Interstate comparisons

Table 4.1, below, compares key aspects of the proposed regulatory regime for bus safety in Victoria with those currently in place in a number of other Australian States for which information is available. This information demonstrates that the regulatory approaches proposed to be adopted in Victoria are generally comparable with those adopted in other relevant jurisdictions and are, in fact, less onerous in some respects than those applicable elsewhere.

Table 4.1 :summary comparison of Australian bus safety regulation

	Accreditation[19]	Renewal of accred.	Operator training	SMS	Annual bus inspections	Def. of a bus
Vic	Commercial operators	No	Yes	Yes	Yes	10 or more seats
NSW	Commercial operators	Yes 3 yearly	Yes	Yes	Yes	10 or more seats
Qld	Commercial operators	Yes 5 yearly	Yes	No	Yes	10 or more seats
WA	Commercial operators	NA	No	Yes[20]	Yes	13 or more seats
SA	Commercial operators	Yes	Yes	Yes	Yes	13 or more seats
Tas	Commercial operators	Yes	No	No	Twice yearly[21]	9 or more seats
ACT	All operators	No	Yes	No	Random[22]	10 or more seats
NT	Commercial operators	Yes 5 yearly	No	No	Twice yearly	9 or more seats

Table 4.1 shows that operator accreditation is required in all Australian States, while most states require accreditation to be renewed periodically. Hence, Victoria's legislation is less onerous than that of most other States in this regard.

Operator training requirements are a condition of accreditation in all but two jurisdictions, with the nature and extent of these training requirements being broadly similar in most jurisdictions. SMS are required in Victoria, NSW, WA and South Australia, but not in the remaining jurisdictions. Annual bus inspections are required in five jurisdictions, while two jurisdictions require twice annual inspections and the remaining jurisdiction (the ACT) has a random inspection regime in place.

In sum, there is a high degree of similarity in approaches to bus safety regulation across Australia. Victoria's proposed regulatory structure cannot, on balance, be regarded as more onerous than that applying in other States. While not all States require SMS and operator training as a condition of accreditation, as does Victoria, the fact that renewal of accreditation will no longer be required in Victoria reduces costs vis-a-vis most other jurisdictions.

[19] Data on specific requirements applicable to non-commercial operators in other jurisdictions could not be obtained in the course of preparation of this RIS.
[20] WA does not have an explicit SMS requirement contained in its bus safety legislation, but does impose an equivalent requirement via its occupational health and safety legislation.
[21] Can be relaxed to yearly inspections for operators with an excellent inspection record, on application to the regulator.
[22] The legislative requirement in the ACT is that operators present buses for inspection "within a reasonable time". PTSV advises that a 28 day period is normally allowed in practice. This implies that the inspection system does not capture the potential benefits of a random inspection regime, in that advance notice of inspections is, in effect, routinely given to operators in order to minimise operational disruption.

5. Expected costs of the proposed regulations

5.1. Data sources and approaches

In order to obtain data upon which to base estimates of the expected costs of the proposed regulations a bus operator survey was designed as part of the process of development of the current RIS. The survey was sent by the Department of Transport in October 2009 to approximately 100 accredited bus operators, covering the full range of existing accreditation types. Respondents were provided with contact details of a person from whom they could seek assistance in interpreting and completing the survey forms. The survey document requested that completed surveys be returned via e-mail or post.

The response rate was relatively poor, with only 10 completed survey forms being received. The major reason for was that the major industry association representing accredited bus operators, the Bus Association of Victoria (BAV) provided a single response on behalf of its membership.

Consequently, one of the survey responses received was completed by the BAV, while the remaining nine responses were received from small operators who are believed not to be BAV members. These nine small operators are involved in the provision of the following bus services:

- private bus services (four responses)
- day tour/charters services (two responses)
- courtesy bus services (two responses)
- scheduled passenger services (one response)

The nine respondents operate a total of 23 buses between them, with seven of the nine respondents operating only one bus.

Given the above, these nine responses can clearly not be taken as constituting a representative sample of the bus industry as a whole. Consequently, the analysis of the data provided must reflect this fact. That said, the fact that these responses derive from those sectors of the bus industry that fall outside the main area of representation of the BAV suggests that these responses should be considered to be complementary to the single response provided by the BAV on behalf of its membership.

The approach taken by BAV to this data gathering exercise has necessarily reduced the data available for use in developing cost estimates in the current RIS. It may be speculated that BAV approach reflects a view of the existing regulations as essentially uncontroversial, with compliance costs implications that are considered to be reasonable and proportionate. Certainly, this view is reflected in the survey response received from the BAV, which characterises a large proportion of the individual costs identified as being trivial in extent and/or consistent with "business as usual" practices.

That said, it must be noted that the BAV membership is essentially composed of relatively large scale operators and that the organisation has consistently lobbied for improved safety standards and for the extension of bus safety regulation to include smaller (i.e. 10 to 12 seat) buses. It may be the case that smaller operators, particularly in the non-commercial sector, would face more significant compliance costs, as is often the case in regulatory contexts. This dynamic may explain the fact that the BAV response suggests lesser cost implications of the regulations among its membership than do the responses of the smaller operators who have responded to the survey individually.

In sum, the costings presented in the following sections can only be regarded as indicative, for the reasons set out above.

5.2. Existing versus proposed regulations

In this context, it is important to provide a general comparison between the content of the existing regulations and the proposed regulations. In general, there is a high degree of similarity between the existing and proposed regulations, such that the overall degree of stringency of the regulations might be characterised as being essentially unchanged. However, in a limited number of areas there will be significant reductions in regulatory compliance costs. These relate in particular to the narrowing of the scope of the current accreditation requirements, via the adoption of the alternative of a more streamlined registration process for non-commercial operators and the narrowing of the training requirements for those seeking operator accreditation.

Consequently, it is not expected that there will be any substantial incremental cost increases as a result of the move from the existing to the proposed regulations, while some operators will see regulatory cost reductions over time.

The major exception to the above is that operators who utilise only buses with 10 to 12 seats will fall within the ambit of the regulations for the first time. However, this change is attributable to the Act, rather than the proposed regulations themselves. This is true also in respect of the establishment of the registration requirement, albeit that the specific administrative arrangements connected with registration are contained within the proposed regulations.

Changes in accreditation numbers

Table 5.1, below, sets out the number of operators currently accredited in each accreditation category and the number of buses operated by accredited operators in each category. A total of 1504 bus operators are currently accredited, with a total of 7740 buses being operated by this group as a whole. These numbers represent a slight reduction over the past two years: as at March 2008, there were 1548 accredited operators operating a total of 8201 buses. It is believed that the reduction in the number of operators is the result of a number of small operators being taken over by larger operators. In relation to the reduction in the number of buses, comparison of the data indicates that the number of buses operated by accredited operators (code AO) has increased slightly, while the number of buses operated in all other categories has declined. These declines have been greatest in relation to courtesy bus

operators (-43.0%), charter service operators (-23.0%) and scheduled operators (ie predominantly school bus operators) (-16.0%).

Table 5.1: Bus industry accreditation by category (current)[23]

Operator class	Number of operators	Number of buses
Accredited operator (both route bus and charter services) [Code AO]	248	5,190
Accredited charter (charter services) [Code AC]	278	859
Scheduled Operator (mostly school bus operators) [Code S]	370	630
Courtesy [Code C]	146	180
Private [Code P]	420	701
Hire and drive [Code HD]	42	180
Total	**1,504**	**7,740**

Source: PTSV. Data as at February 2010.

The number of accredited operators can be expected to decline significantly as a result of the implementation of the Act. In particular, as noted above, the Act removes the requirement imposed on non-commercial bus operators to be accredited, instead, creating a category of registration to which non-commercial operators are eligible to apply. The category of registered operator is intended as a "light handed" form of regulation that is better adapted to be circumstances of non-commercial operators.

Current estimates of the impact of this change on the number of operators that will need to be accredited under the new legislative and regulatory arrangements are as follows:

- Hire and drive operators do not fall within the definition of providers of a bus service and do not require accreditation.
- All private bus operators will be eligible for exemptions, as they are regarded as non-commercial. A majority of this group are school buses.
- A small proportion of the courtesy bus sector (estimated at 20%) are expected to be determined to be non-commercial. This will compose situations in which the user does not obtain any other service from the operator and, as a consequence, the operator of the service does not derive any commercial benefit from the provision of the service.

Given these estimates, the number of accredited operators is expected to be reduced by 491, from the current 1504 to approximately 1013. Thus, approximately one third of currently accredited operators is expected to be eligible for exemption from the accreditation requirement as a result of the proposed provision of exemptions for non-commercial operators.

[23] Data as at March 2008.

Regulatory cost savings equal to the ongoing costs of accreditation that would otherwise be incurred by this group will therefore be reaped due to the changes contained in the Act. In addition, savings will occur due to the fact that new entrants to the non-commercial sector will not need to become accredited. These changes clearly also have significant implications for the costs of the proposed regulations. Consequently, these estimates of the number of operators expected to be accredited (and registered) have been adopted below in developing estimates of the cost of the proposed regulations.

Table 5.2 summarises the expected number of accredited and registered operators under the new arrangements.

Table 5.2: Bus industry accreditation & registration by category (predicted)[24]

Operator class	Accredited operators (buses)	Registered operators (buses)
Accredited operator (both route bus and charter services) [Code AO]	248 (5,190)	-
Accredited charter (charter services) [Code AC]	278 (859)	-
Scheduled Operator (mostly school bus operators) [Code S]	370 (630)	-
Courtesy [Code C]	117 (144)	29 (36)
Private [Code P]	-	420 (701)
Hire and drive [Code HD]	-	42 (180)
Total	**1,013 (6,823)**	**491 (917)**

Table 5.2 shows that, while almost one third of currently accredited operators are expected to move to the registration category, this group accounts between them for only slightly more than 900 of the 7,740 buses currently being used by accredited operators. Thus, more than 88% of the current bus fleet will continue to be operated by accredited operators.

While the creation of the "registered operator" category will significantly reduce the number of operators required to be accredited, a second change made in the Act will increase registered operator numbers beyond the level predicted above. This is the change in the definition of a bus.

Change in definition of 'bus' – effect on coverage of the regulatory regime

Under current arrangements, only vehicles that seat 13 or more people (including the driver) are regarded as buses. Under the Act all vehicles that seat more than nine people, including the driver, will be regarded as buses. Consequently, any organisation that solely operates vehicles with a seating capacity of between 10 and 12 persons will, for the first time, be brought within the scope of the regulatory arrangements governing buses. These operators will be required to become either accredited or registered, depending on the nature of their operations[25].

[24] Data as at March 2008.

[25] As discussed below, it is assumed that all commercial operators among this group also operate larger buses (i.e. bus is seating 13 or more people) and are, as a result, already accredited. On the basis of this assumption, it

According to VicRoads data, there are currently 3,806 registered owners of vehicles in this category, operating a total of 5,517 buses. Of this group, 3,099 operate only one vehicle, while 707 operate two or more vehicles with a seating capacity of between 10 and 12 persons.

A proportion of this group will already be regulated. This reflects the fact that many of these buses can be expected to be registered to operators that also run a bus or buses with 13 or more seats and are, as a result, already required to be an accredited operator. No information is available regarding the proportion of these 10-12 seat buses owned by currently accredited operators. Thus, it has been assumed that all owners of multiple 10-12 seat buses are commercial operators and are currently accredited, while all owners of a single 10-12 seat bus are non-commercial operators and are currently unaccredited[26]. Thus, the number of operators of 10 – 12 seat buses required to be registered for the first time is estimated as 3,099 operators. In addition, the 491 currently accredited non-commercial operators expected to be given exemptions from accreditation will need to be registered. Thus, a total of 3,590 operators are expected to be registered in year 1. These operators are estimated to use 3,099 10-12 seat buses, as well as 917 larger buses, or 4,016 buses in total.

5.3. Equipment requirements

Part 2 of the regulations ("Bus Operations") establish a range of specific requirements in relation to equipment that must be fitted to buses. In particular:

- Regulation 7 requires that operators of school buses must ensure that all school buses are fitted with lights and signs or hazard warning devices.
- Regulation 8 requires that fire extinguishers fitted to buses be maintained in operating condition.
- Regulation 9 requires that any signs specified by the Safety Director are displayed on all buses.
- Regulation 10 requires buses to display the required number plates.

These requirements are almost identical to those contained in the current regulations. Significant retrofitting costs were incurred following the introduction of these regulatory requirements, with a substantial part of these costs being funded by government. Consequently, all currently operating buses are assumed already to be compliant with these requirements. Thus, no additional costs will be incurred in meeting these requirements in respect of the existing bus fleet.

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is not expected that the change in the definition of the bus will have any effect on the number of accredited operators.

[26] It is also implicitly assumed that these accredited operators currently apply the existing accreditation-related requirements to these vehicles along with the remainder of the fleet, despite the fact that they are not currently formally defined as buses. Following from this, no cost increases are estimated in respect of this group of 10-12 seat buses. By extension, no benefits are estimated in respect of improved safety performance for this group.

These requirements could, potentially give rise to additional costs where new buses are added to the fleet. However, PTSV advises that these requirements are also contained within the relevant vehicle standards and that, for this reason, all newly delivered buses are already equipped to the appropriate standard as a matter of course. Consequently, it is not believed that these requirements will impose any additional costs where new buses are added to the fleet.

In this context, the main benefit of this aspect of the regulations is likely to be that it provides a mechanism by which regulators can ensure that in-service buses continue to meet the relevant standards.

Finally, it is acknowledged that some maintenance costs may be incurred in order to ensure that the relevant equipment continues to be maintained in an operational state. However these costs are considered to be extremely small in extent and have not been able to be quantified.

5.4. Establishing and maintaining MIS/MMS

Regulations16 and 17 require all accredited operators to establish and maintain both Management Information Systems (MIS) and Maintenance Management Systems (MMS). Regulation 14 establishes that it is a condition of accreditation that MIS and MMS be audited annually and that any deficiencies found via this audit process be rectified. Thus, the costs of maintaining (including auditing) these systems can be considered to be attributable to the regulations, rather than to the Act.

Currently accredited operators will incur only the annual cost of maintaining these systems, while new entrants to the industry will incur the relevant setup costs in addition.

A number of estimates of these costs are available. These are discussed below.

BAV estimates

The BAV response to the questionnaire included the following comments in relation to the cost of developing and maintaining MIS:

> *"The cost of developing the MIS, including help kit, was borne by the Department of Infrastructure and BusVic [i.e. the BAV] several years ago, so the cost was negligible. The Association receives calls from time to time, which are viewed as member service and negligible cost. The Association has a template which it makes available to all members; some modify it to suit their own business needs, yet most adhere to the template. The annual cost of maintaining the MIS is negligible.*

Similarly, in respect of MMS, the BAV made the following comment:

> *"The cost of initially developing the MMS (and subsequent reviewing/updating of the MMS) is negligible. The Association had a voluntary subcommittee complete this task recently at no expense."*

Discussions with BAV officers indicated that BAV is of the opinion that the regulatory requirements in relation to MIS and MMS go no further than the requirements of good business practice and that, as a result of this fact, any increases in "business as usual" costs due to these provisions would be negligible in respect of well-managed bus operators. Further, they effectively regard all of their members as fitting within this category.

Questionnaire responses from small bus operators

Table 5.3, below, summarises the average costs of developing and maintaining MIS and MMS reported by the nine small bus operators who responded to the questionnaire distributed.

Table 5.3: Cost Per Operator of Developing and Maintaining MIS and MMS

Activity	Staff time (hours)	Cash costs
Developing MIS	17.3	$133.33
Maintaining MIS	25.0	$200.20
Developing MMS	9.2	$150.00
Maintaining MMS	3.9	$182.00

The average total cost per bus operator of meeting the above regulatory requirements can be calculated using average hourly wage rates and applying an appropriate multiplier in respect of overhead costs. According to the ABS[27], average weekly earnings are currently $1201.90, while the average number of hours worked by full-time employees is 41.2 per week. This implies an average hourly wage rate of:

$1201.90/41.2 = $29.17.

As recommended by the *Victorian Guide to Regulation*, this hourly wage rates can be multiplied by 1.75 in order to account for overhead costs, including non-wage labour costs such as superannuation, long service leave, etc and as well as the costs of office space, office equipment and the like. This implies a total hourly labour cost of:

$29.17 x 1.75 = $51.05

[27] See ABS Cat. 6510.0 *Australian Labour Market Statistics*, January 2010. Data are for adults of full-time ordinary time earnings and for average hours worked by full-time employees respectively. The former statistic relates to August 2009, while the latter relates to November 2009. These are the latest available data in each case.

Table 5.4: Estimated Dollar Costs of Developing and Maintaining MIS and MMS (per operator)

Activity	Internal costs (hours x daily cost)	Cash costs	Total
Developing MIS	17.3 x $51.05 = $883.16	$133.33	$1,016.49
Maintaining MIS	25.0 x $51.05 = $1,276.25	$200.20	$1,476.45
Developing MMS	9.2 x $51.05 = $469.66	$150.00	$619.66
Maintaining MMS	3.9 x $51.05 = $199.10	$182.00	$381.10

Table 5.4 shows that the estimated dollar cost of initially developing an MIS, based on the estimates of the small bus operators, is $1,016.49, while the annual cost of maintaining the MIS is $1,476.45. The present value of the costs involved in maintaining an MIS over the expected 10 year life of the regulations is equal to $12,279.05. This represents the total costs that would be born in relation to this requirement by existing bus operators. New entrants to the industry would face total costs of $13,261.17 including the initial cost of developing the MIS as well at its annual maintenance costs.

Similarly, the estimated dollar cost of initially developing an MMS is $619.66, while the annual cost of maintaining the MMS is $381.10. The present value of the maintenance costs for an MMS over the expected 10 year life of the regulations is equal to $3,169.46. This is the total cost that would be incurred by existing bus operators. New entrants would incur total costs of $3,768.16 in present value terms over 10 years, including the initial development costs of the MMS.

Previous RIS estimates

A third set of estimates of the costs of developing and maintaining MIS and MMS were contained in the 1998 RIS prepared in respect of the *Public Transport Competition Regulations 1999*, which regulations effectively introduced these requirements. These cost estimates are necessarily somewhat speculative in nature, however, given that they were developed prior to the implementation of the regulatory requirements. Table 5.5, below, sets out these costs in current dollar terms[28].

Table 5.5: Costs of developing and maintaining MIS and MMS

	Initial development	annual maintenance
MIS	$444.78	$166.79
MMS	$416.98	$2254.49

The present value of the cost of maintaining the MIS over the expected 10 year life of the regulations is $1,387.13, while the present value of the costs to a new entrant of developing the MIS and maintaining it over this period is $1,820.73.

[28] That is, the dollar cost estimates contained in 1998 RIS have been updated to current dollar terms using the ABS CPI index.

The present value of the cost of maintaining the MMS over the expected 10 year life of the regulations is $18,749.70, while the present value of the costs to a new entrant of developing the MMS and maintaining over this period is $19,152.58.

Comparing the cost estimates

In comparing the above three sets of cost estimates, it is important to bear in mind an important conceptual distinction. The view of BAV is that the net, or incremental, costs of developing and maintaining MIS and MMS are negligible. This reflects their view that such systems would, in any case, be adopted by most or all bus operators as part of good business practice, even in the absence of regulatory requirements. That said, the specific comments made in the BAV questionnaire response also suggested that the gross costs involved in developing the systems are believed to be quite small.

By contrast, the cost estimates provided by the small bus operators who responded to the questionnaire, as well as those contained in the 1998 RIS, effectively represent gross cost estimates. That is, they include the full cost of developing and implementing these systems, rather than simply the additional costs (compared with the "business as usual" base) imposed by the regulations.

Comparison of the cost estimates derived from the current questionnaire responses and the estimates derived from the 1998 RIS shows that the total cost estimates are relatively similar, while the estimated costs of specific items vary quite substantially. This is summarised in table 5.6, below.

Table 5.6: Comparison of Cost Estimates (present values over 10 years)

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	Questionnaire	**1998 RIS**	**Difference (%)**
Initial MIS	$982.12	$433.60	
MIS Maintenance	$12,279.05	$1,387.13	
Total MIS	$13,261.17	$1,820.73	
Initial MMS	$598.71	$402.88	
MMS Maintenance	3,169.46	18,749.70	
Total MMS	3,768.16	19,152.58	
Total (MIS + MMS) (exc. initial development)	$15,448.51	20,136.83	
MIS + MMS (incl. initial development)	17,029.33	20,973.31	+23.1%

Table 5.6 shows that the estimated total cost of preparing and maintaining both MIS and MMS over 10 years is 23.1% higher when calculated according to the 1998 RIS estimates than when calculated according to the questionnaire responses received. This represents a relatively high degree of congruence in the estimates, given the inevitable degree of uncertainty attaching to cost estimation in these contexts. However, it can also be observed that there are very substantial differences in the estimates relating to individual cost items.

For example, the present value of the cost of maintaining the MMS over 10 years is estimated at $18,749.70 using the 1998 RIS data, compared with only $3,169.46 using the questionnaire data. That is, the former cost estimate is more than five times as large as the latter. Conversely, where the 1998 RIS data yields a MIS maintenance cost of $1,387.13 in present value terms over 10 years, estimates based on the questionnaire data yield a figure that is almost an order of magnitude higher, at $12,279.05.

These differences necessarily mean that these cost estimates must be treated with extreme caution. However, a number of factors justify a conclusion that the overall costs involved in complying with these regulatory requirements are quite small. In particular:

- The total cost estimates presented above, using the two different datasets, imply costs the present value of which are between $17,000 and $21,000 approximately over 10 years. This is equivalent to average annual costs (in present value terms) of between $1,700 and $2,100. These costs can be considered to be relatively low in relation to the overall cost of bus operations, even for small operators.
- The above cost estimates are, in any event, based on the gross cost of complying with the proposed regulations, whereas similar systems would be likely to be put in place by most bus operators even in the absence of regulation. Thus the *net* cost of these requirements is likely to be very much lower than the gross cost estimates would suggest.
- The estimates provided by the BAV and discussed above lend support to the above point. While the BAV did not provide any qualitative estimates, it expressed a clear view that the net costs associated with the regulatory requirements were, in effect, trivial in nature.

The latter point is particularly important. Given that the industry association that represents the majority of bus operators is of the clear view that the net costs of these regulatory requirements are insignificant in nature, there is little reason to suggest otherwise.

That said, it is arguable that very small bus operators would face higher net costs than the larger operators that comprise the BAV membership, since these smaller operators may be less likely to adopt management systems that are generally consistent with the MIS/MMS model in the absence of regulatory requirements of this type. However, the major substantive change to the coverage of the accreditation requirements (and hence the scope of coverage of these particular regulatory obligations) that will be implemented when the new Act comes into operation is the removal of the previous requirement for non-commercial bus operators to be accredited. Therefore, a high proportion of the smallest bus operators, including a majority of those who responded to the questionnaire developed for this RIS, will no longer be faced with these costs.

This suggests that, for the bus industry as a whole, the net regulatory costs that derive from the requirement to develop and maintain MIS and MMS are likely to be extremely small.

Aggregate costs of developing and maintaining MIS and MMS

Aggregate estimates of the costs of developing and maintaining MIS and MMS have been developed based on the data contained in the questionnaire responses. This data is preferred to that contained in the other two available data sources (that is, the BAV questionnaire

response and the 1998 RIS data) because it is both current and based on actual operator estimates.

It is arguable that estimates based on the questionnaire responses received are likely to underestimate average costs, since the questionnaire respondents were uniformly small-scale operators. Against this, it can be noted that the BAV questionnaire response indicated that the average costs incurred by its members would, in fact, be lower than those estimated on the basis of the questionnaire responses.

It is also arguable that the small number of questionnaire responses received significantly diminishes the degree of reliance that can be placed on the resulting data. This criticism clearly has merit. However, the above discussion indicates that the cost estimates derived from the questionnaires are, in the aggregate, clearly comparable to the estimates made in the 1998 RIS. This provides a degree of reassurance as to the reliability of the estimates used.

Costs incurred by currently accredited operators

Currently accredited operators will already have compliance MIS and MMS in place. These systems will continue to be regarded as compliant under the proposed regulations. Consequently, the costs that they will incur are solely the costs of maintaining the relevant systems. These costs are summarised in table 5.7, below.

Table 5.7: Costs of maintaining MIS and MMS for currently accredited operators

	Per operator		**Total**	
	Year 1	PV (10 years)	Year 1	PV (10 years)
MIS maintenance	$1,476.45	$12,279.05	$1,495,643.85	$12.4 million
MMS maintenance	$381.10	$3,169.46	$386,054.30	$3.2 million

Table 5.7 shows that the annual cost to currently accredited operators of maintaining MIS and MMS are expected to total approximately $1.9 million, while the present value of these costs over the expected 10 year life of the proposed regulations is equal to $15.6 million. These costs constitute gross costs. That is, they constitute the full cost of complying with the relevant parts of the regulations and do not account for the fact that most operators would be likely to incur a significant percentage of these costs in conducting "business as usual" even in the absence of specific regulatory requirements.

In addition to these costs, new operators obtaining accreditation for the first time will incur the cost of initially developing MIS and MMS. These were estimated above at $1016.49 and $619.66 respectively. The aggregate costs involved are clearly dependent upon the rate of entry to the bus industry. PTSV data show that the number of new applicants for accreditation in recent years has been around 6.5% per annum. Given that the expected number of operators that will need to be accredited under the Act has been estimated above at 1,013, this implies an average of around 65 new entrants per annum.

On this basis, annual costs of $66,071.85 will be incurred in respect of development of MIS and costs of $40,277.90 will be incurred in respect of development of MMS. Thus, the total costs incurred annually by newly accredited operators will be $106,349.75. This is equal to approximately $0.9 million in present value terms over 10 years.

Thus, the total cost of complying with MIS and MMS requirements of the proposed regulations is estimated as being equal to $16.5 million in present value terms over 10 years. These costs are gross costs and a significant proportion of them would be expected to be incurred as part of business as usual expenditures in the absence of regulatory requirements in this area.

It should also be noted that these costs are significantly smaller than those that would be incurred were the existing legislation and regulatory requirements to remain in place. As noted above, 491 currently accredited operators would continue to be required to maintain MIS and MMS were the existing legislation to continue. On the basis of the above calculations, this group would collectively incur costs of approximately $7.6 million in present value terms over 10 years in maintaining MIS and MMS. Thus, the move to narrow the scope of the accreditation requirements, adopted via the Act, is expected to reduce industry costs in this area by approximately 31.5%.

5.5. Applications for accreditation/renewal of accreditation

All bus operators are currently required to be accredited, with accreditation being renewable at five yearly intervals. Under the new legislation arrangements, there will be no requirement for renewal of accreditation. The accreditation status of existing bus operators will be deemed to constitute accreditation under the Act. However, as accreditation under the current legislation will expire five years after having been granted, currently accredited operators will need to renew their accreditation under the new legislation at the time that the existing accreditation expires.

This means that all currently accredited bus operators will need to undergo renewal of accreditation once during the life of the proposed regulations, while new entrants to the industry will need to undergo initial accreditation on a once only basis.

Questionnaire responses

Only a small number of responses were received to the questionnaire question as to the administrative costs of meeting these requirements, while there was significant variation in the cost estimates provided amongst the small number of respondents. However, average costs were calculated and are summarised in the following table.

Table 5.8: Administrative costs of applying for accreditation

Activity	Internal resources (hours/dollar value)	Cash costs	Total
Initial accreditation	7.25 ($370.11)	$6,000	$6,370.11
Renewal	8.3 ($423.71)	$184.47	$608.18

Table 5.8 shows that respondents reported that they incurred significant cash costs in meeting the administrative requirements for making an initial application for accreditation. The

average cash costs reported of $6000 compares with a reported average of only 7.25 person hours of internal resources devoted to tasks related to the initial application for accreditation.

By contrast, respondents indicated that the majority of the costs incurred in completing and submitting an application for renewal of accreditation involves internal resources. The implicit costs average of 8.3 hours of internal resources devoted to this task is $423.71, more than twice as much as the reported average cash costs of $184.47.

Considering the average total costs reported, it is notable that the reported cost of renewal of accreditation is very substantially below that of initial accreditation: indeed, the estimated average cost of renewal of accreditation of $608.18 is less than one tenth of the reported initial accreditation cost.

It must be emphasised that these reported costs are purely the administrative costs of applying for accreditation, including the costs of obtaining and collating required documentation, completing and submitting forms, responding to any queries from the letter regulator, and the like. They do not include the substantive costs of complying with the legislative and regulatory requirements for accreditation.

BAV questionnaire response

The BAV did not, in responding to the questionnaire circulated in relation to this RIS, provide any estimate of the administrative costs involved in making either initial accreditation applications or applications for renewal of accreditation. The only comments made by BAV in this context were that:

- In relation to initial accreditation costs "costs are only the cost of the training provider, Monash University charges. Most staff complete the course in their own time part time.
- In relation to renewal of accreditation, the BAV noted that "fees are charged by PTSV on a per bus basis, annually".

In relation to the former point it is noted that the requirement for at least one employee of an accredited operator to have completed the relevant training course is established in the Act, rather than the proposed regulations, and that these costs are therefore not attributable to the regulations and thus outside the scope of the current RIS. The fees charged in relation to annual bus inspections are considered separately, below.

Aggregate costs

Again, the aggregate costs of these requirements have been estimated on the basis of the questionnaire responses received. As discussed above, it is expected that 1013 operators will remain accredited under the Act. Given that accreditation must currently be renewed at five yearly intervals, this implies that average of 203 renewals of accreditation will be processed annually during the first five years of the operation of the proposed regulations. This implies that the average annual costs associated with renewal of accreditation by currently regulated bus operators will be:

$608.18 x 203 = $123,460.54

As above, it is assumed that the rate of entry of accredited operators will be approximately 6.5%. This implies that 65 intending operators will undergo the accreditation process the first time in each of the 10 years during which the proposed regulations are expected to operate. The annual cost of this group will total:

$6370.11 x 65 = $414,057.15

The total costs associated with applying for initial accreditation and renewing accreditation are therefore estimated at approximately $3.4 million in present value terms over 10 years.

These costs can be considered to be wholly attributable to the regulatory regime, since they relate only to the administrative costs of achieving and maintaining accreditation, rather than to the substantive compliance requirements.

These costs are somewhat lower than those that would have been incurred were the current legislative arrangements to have continued. In that case, an additional 491 operators would be required to retain their accreditation. This is equal to an average of 98.2 accreditation renewals per annum on average. The additional costs incurred would be:

$600.18 x 98.2 = $59,723.28.

This is equal to approximately $0.5 million in present value terms over 10 years[29].

In addition, the 1013 operators who will remain accredited under the new legislation would have had to renew their accreditation on one further occasion during the expected 10 year life of the proposed regulations. As indicated above, this is equivalent to additional costs averaging $123,461 in each of years 6 to 10. This is equal to $0.6 million in present value terms.

Summing these two figures indicates that the total administrative costs associated with accreditation will be $1.1 million lower, in present value terms, over the expected life of the proposed regulations than would be the case were the existing legislative requirements to continue in force.

5.6. Retention of records

Regulation 16 requires that accredited operators retain a range of records in a safe and secure location[30] for a period of three years. Respondents to the questionnaire estimated the annual cost to them of these record retention requirements as being 9.3 person hours time, plus a cash costs averaging $424. Using the average labour cost figure of $51.05 per hour calculated above, the estimated average annual cost of the record retention requirements are used:

[29] Moreover, new non-commercial operators entering the industry will face lower regulatory costs than would otherwise have been the case, as they will be subject to the less onerous requirements of registration, rather than being required to be accredited, as at present.
[30] This can include electronic storage.

(9.3 x $51.05) + $424.00 = $898.77.

Again, this cost figure can be interpreted as constituting the gross cost of record retention requirements, while it is likely that most businesses would choose to maintain a range of records for a similar period, even in the absence of a specific regulatory requirement. The BAV response to the questionnaire clearly indicated their view that this was the case, stating:

> *"The cost associated in complying with the record retention requirements is zero. Industry views the processes in place as absolutely essential as part of running a modern, efficient, safe bus operation."*

Given that the conceptual requirements in relation to RIS is to identify the incremental costs associated with a proposed regulation, the relevant costing is the net cost of record retention, rather than the gross cost. Given the BAV response, it is considered that this net cost approximates zero.

5.7. Applications for registration

This section estimates the administrative costs of preparing and submitting applications for registration. That is, the costs highlighted below are simply those involved in completing the required application forms and submitting these, together with any supporting documentation required, to the regulator for assessment. The substantive costs associated with meeting the regulatory requirements for registration are expected to be influenced primarily by guidance material issued by PTSV under the Act in order to provide guidance on complying with the safety duties established in the Act. These costs clearly fall outside the scope of the regulations and this RIS.

The process of application for registration is expected to be a relatively simple one, requiring minimal time for completion and incurring minimum administrative costs. The application is required to be accompanied by the following information (in the case of an application on behalf of a company):

- company incorporation details and names of directors
- name of a contact person involved in the bus operations, with whom the Safety Director is entitled to communicate
- copies of roadworthiness certificates for each bus to be operated
- dates of any previous registrations or accreditations held.

No fees will be payable in respect of registration. This recognises the fact that this group of operators is composed of non-profit community organisations, schools and the like.

Given the very limited information that will be required to be included in an application for registration, the Department of Transport believes that gathering and submitting the above materials will require only a half-hour to complete, on average. It should be noted, in this context, that the great majority of operators seeking registration will be operators of only one bus, while the remaining group will also operate only a small number of buses in most cases (see section 5.2, above). Using an hourly labour cost of $51.05 (costed at AWE plus 75% on-costs), the expected year one cost of registration applications to bus operators is estimated at:

$51.05/2 x 3,590 = $91,635

Similar costs are expected to be borne by the regulator due to the need to process applications, record registrations, etc.

Registrations are not subject to renewal. That is, there is no specific term of registration. Consequently, the above cost is a "one-off" cost, from the point of view of the operators requiring registration at the commencement of the proposed regulations. Given the above estimates of an entry rate into the industry of approximately 6.5% annually, this implies additional registration costs for new entrants averaging $5,956 per annum. The administrative costs of registration are estimated, on this basis, to have a present value of approximately $132,315 over the expected 10 year life of the proposed regulations.

5.8. Annual bus inspections

Regulation 24 requires that each bus be inspected annually by a licensed inspector. An adjusted average inspection fee of $270.60 has been calculated on the basis of the questionnaire responses received[31]. In addition, respondents reported that an average of 3.7 hours of staff time was devoted to activities related to the annual inspection requirement. This would include the time required to drive the bus to the inspection facility, the waiting time involved and the return journey time. Using the above methodology, the cost of this staff time is calculated at (3.7 x $51.05) = $188.89. Thus, the total costs per bus of complying with the annual bus inspection requirements of the regulations is calculated at:

$270.60 + $188.89 = $459.49.

As noted above, a total of 7740 buses are currently being used by accredited operators and are subject to annual inspection requirements under the existing regulations. Given the estimated inspection related costs $459.49 per bus, this implies annual inspection related costs total:

$459.49 x 7,740 = $3,556,453

In addition, VicRoads data indicate that there are currently 5,517 vehicles with a seating capacity of between 10 and 12 seats which will, for the first time, be classified as buses under the proposed legislation. These vehicles will, consequently be subject to the annual inspection requirement set out in the regulations for the first time. The average cost of vehicle inspections for these small capacity minibuses is substantially lower than the costs incurred for large buses. This is due to the fact that he inspection task is significantly less complex in relation to these smaller vehicles. Advice from VicRoads is that the average cost of roadworthiness testing for 10-12 seat buses is currently approximately $100.

Additional costs in terms of staff time devoted to undertaking annual inspection-related activities will also be incurred in respect of these minibuses. However, the time requirement

[31] A total of five responses were used in calculating this average. A small number of responses reported substantially higher cost figures which appear potentially to have included the costs of remedying faults detected. These responses were excluded in calculating the average fee.

can be expected to be significantly less due to the less extensive nature of the inspection to be undertaken. No data are available on the actual time cost involved. Hence, an indicative estimate is adopted, based on reducing the above estimate of 3.7 hours for large buses by 1.5 hours, to 2.2 hours.

Given the above assumptions, the average annual inspection cost for a 10 - 12 seat bus is estimated at:

$100 + (2.2 x $51.05) = $202.10.

Given that there are estimated to be 5,517 10 - 12 seat buses that will be subject to the inspection requirement, additional annual inspection related costs are expected to total:

$202.10 x 5,517 = $1,114,986

Thus, total annual inspection related costs under the proposed regulations are estimated at:

$3,556,453 + $1,114,986 = $4,671,439

These costs are summarised in table 5.9, below.

Table 5.9: Estimated costs of bus inspections

	Annual	**PV over 10 years**
Existing regulations	$3.6 million	$29.6 million
Proposed regulations	$4.7 million	$38.9 million
Incremental cost	$1.1 million	$9.3 million

Table 5.9 shows that the cost of bus inspections is expected to increase by approximately 30%, or $1.1 million per annum under the proposed regulations, by comparison with the current arrangements. This increase is entirely due to the impact of the sea change in the definition of a bus contained in the Act. Specifically, as a result of this change, all 10 to 12 seat buses will, for the first time, be regarded as buses from the regulatory perspective and will consequently be required to be inspected.

As discussed above, approximately 5,517 vehicles are believed to be affected[32], with more than 3000 of these vehicles being owned by operators who each own only one such vehicle. It is assumed that all of this group would be defined as non-commercial operators, while it is also likely that a proportion of those operators who operate more than one such vehicle are also non-commercial operators.

For operators who only use a 10 to 12 seat bus, the annual inspection requirements will constitute a new regulatory burden. However, the average inspection cost of this class of vehicle has been estimated above as constituting a cash cost of only $100, together with staff

[32] This may constitute an over estimate of the number of vehicles affected, since it is based on unadjusted VicRoads registration data. PTSV believes that a significant proportion of this total number of 10 to 12 seat buses recorded in the registration statistics may not be operating as buses but, rather, have been converted to other users via the removal of the passenger seating. However, it has not been possible to obtain a reliable estimate of the number of vehicles that may fall into this category.

time associated with presenting the bus for inspection calculated at 2.2 hours. Given this, the Department of Transport believes that this additional regulatory burden is reasonable and appropriate in the context of the important contribution which it believes that regular vehicle inspections make to the achievement of high levels of bus safety. That said, it has been acknowledged elsewhere that the specific data that would demonstrate conclusively the link between bus inspections and improved safety performance are not available.

Moreover, a further substantial consideration in this regard is the fact that the majority of these operators are likely to be non-commercial in nature and, as a result, operating as registered operators rather than an accredited operators. The fact that this group is not subject to the risk management requirements applicable to accredited operators (particularly the MIS and MMS) suggests that any bus inspections constitute a particularly important part of the safety regime in respect of this group. Consequently, it has been considered appropriate to apply the same level of inspection frequency to this group as to commercial operators.

Attributability of inspection costs

Table 5.9 records the full costs of undertaking annual safety inspections on buses under the proposed regulations. However, while regulation 22 explicitly states that safety inspections are to occur at annual intervals, in the case of accredited operators, this provision merely restates the requirements of section 19 of the Act. Section 19 states that accredited operators must have buses inspected annually, or at intervals prescribed in the regulations. Thus, in the absence of any regulatory requirements, an annual inspection would still need to be undertaken of all buses operated by accredited operators. Conversely, no inspection requirement would exist in respect of buses operated by registered operators, since section 19 (2) of the Act states only that registered operators must have all buses inspected at intervals specified in the regulations.

This implies that only the costs of inspecting buses operated by registered operators should be attributed to the regulations. This is because the cost of inspecting buses operated by accredited operators is more appropriately attributed to the Act.

As discussed above, accredited operators are estimated to use 6,823 buses with 13 or more seats and 2,418[33] 10-12 seat buses. Annual accreditation costs for this group would therefore be equal to:

(6,823 x $459.49) + (2,418 x $202.10) = $3,623,778

This is equal to $30.1 million in present value terms over 10 years.

Given that the estimated costs of bus inspections under the proposed regulations is equal to $38.9 million in present value terms over 10 years, the regulations are estimated to impose incremental costs, over the unregulated "base case" of $8.8 million in present value terms over 10 years.

[33] i.e. There is a total of 5,517 registered 10-12 seat buses. 3,099 of these are operated by operators who each have only 1 bus and are assumed to be non-commercial (hence, registered) operators under the new arrangements. The remaining 2,418 buses, which are registered to operators with more than 1 bus each, are assumed to be operated by commercial, hence accredited, operators.

5.9. Notification/investigation of incidents

Regulations 23 and 24 require that bus operators notify the Safety Director of bus incidents and that the Safety Director may direct them to undertake an investigation of incidents.

Questionnaire respondents did not identify any costs associated with these requirements. The responses provided appeared to indicate that none of the respondents had been requested by the Safety Director to conduct an investigation. It is therefore concluded that the costs associated with this regulation are likely to be small, though unquantifiable on the basis of currently available information.

Information from PTSV provides some indication of the likely extent of an investigation requirement, where one is made. A common type of accident is passenger door entrapment, where a passenger is trapped in the closing door of a bus. In such a circumstance, if the operator were to be required to conduct an investigation, this would involve a mechanic checking the door mechanism and associated systems to verify whether a malfunction had occurred and administrative staff writing a report summarising the findings and conveying this report to the regulator. The total time requirement would be likely to be measured in terms of several man hours.

5.10 Costs to government

5.10.1. Overview of costs to government

PTSV will have an annual budget of $2.3 million to fund its regulatory administration and enforcement activities in relation to the bus industry. This is essentially unchanged from its current budget. However, additional funding totalling $0.9 million will be provided in the first year of operation of the proposed regulations in order to enable it to process the expected 3,500 applications for registered operator status, most of which will come from operators of 10-12 seat buses who have not, until now, been subject to specific bus safety regulation.

PTSV will undertake four major regulatory activities in this area. The resources expected to be devoted to each activity are summarised in Table 5.10, below.

Table 5.10: Major regulatory activities and expected resource costs

Activity	Number carried out (annual)	Budgeted cost (% of total)
Accreditation applications	265	$0.4 million (17.1%)
Registration applications	233	$0.1 million (5.8%)
Audits of accredited operators	500	$1.3 million (57.7%)
Compliance monitoring	450	$0.4 million (19.5%)
Total		**$2.3 million**[34]
PV (10 years)		**$20.0 million**[35]

The "steady state" budget for PTSV of $2.3 million per annum is equal to its current budget in respect of the administration and enforcement of bus safety regulation. However, there will inevitably be changes in the allocation of this budget as a consequence of the regulatory changes being implemented via the Act and the proposed regulations. Of particular note are the following:

Accreditation applications

As noted above, approximately one third of currently accredited operators are expected to move to registered operator status under the new legislation. The remaining group of approximately 1000 accredited operators will need to apply for accreditation under the new legislation at the time that their current accreditation is due to expire. On this basis, it is assumed that an average of 200 currently accredited operators will apply for accreditation in each of the first five years of operation of the proposed regulations. This compares with an annual average of approximately 300 accreditation renewals at present. Thus, the size of the accreditation renewal task will fall significantly.

In addition, it is assumed that approximately 65 applications for initial accreditation will be received annually. This is consistent with current observations of a 6.5% entry rate (or 100 applications for initial accreditation annually). From year six onwards, applications for renewal of accreditation will no longer be received, since accreditation will not be time limited. Therefore application numbers are expected to fall to approximately 65 per annum.

Registration applications

As noted elsewhere, approximately 3500 applications for registered operator status are expected to be received at the time of the commencement of the proposed regulations. This will include approximately 500 applications from currently accredited operators seeking to move to registered operator status and a further 3000 applications from operators who solely use 10 - 12 seat buses.

[34] Budgeted costs comprise wage and salary costs plus non-wage costs equal to 75% of this amount. Individual program costs do not sum to $2.3 million due to rounding issues.
[35] Includes "one-off" cost of $0.9 million to process initial registration applications.

Thereafter, it is assumed that approximately 210 applications for registration will be received annually. This estimate is based on the 6.5% rate of entry currently being observed in the bus industry.

The processing of applications for registration is clearly a new activity, as this operator type has only been established under the Act.

Audits of accredited operators

PTSV undertakes an audit program to verify the compliance of accredited operators with their conditions of accreditation, including compliance with their MMS and MIS. PTSV expects to audit 50% of accredited operators each year, or approximately 500 operators. Given the significant reduction in the number of accredited operators expected under the new legislation, this task will be smaller in size than would otherwise be the case.

Compliance monitoring

Compliance monitoring activities occur in response to information received, rather than being scheduled (as is the case with the audit program). Compliance monitoring activity may be undertaken in response to public complaints, matters arising in the course of mechanical inspections, information received from other regulators (such as VTD and VicRoads) or PTSV's internal intelligence. Compliance monitoring in relation to registered operators would focus on ensuring that the buses they operate are compliant with the vehicle standards and could involve initial checking by PTSV with a possible requirement for the bus to be subject to a full inspection by a licensed bus tester. In relation to accredited operators, compliance monitoring could also involved review of management systems and the like.

It is estimated that approximately 450 compliance monitoring activities will be undertaken per annum by Bus Safety Compliance Officers. Compliance monitoring activities may be undertaken in respect of either accredited or registered operators. However, it is expected that the majority of compliance monitoring will occur in respect of registered operators. This reflects, in large part, the fact that accredited operators will be subject to an audit program (see above), where registered operators will not. The significant increase in the total number of operators subject to the legislation, together with the fact that most will be registered operators, clearly significantly increases the size of this task in the aggregate.

5.10.2. Fee policy and fee revenue

Revenue of approximately $0.7 million is currently derived from accreditation fees.

Currently, there are two fees payable in relation to accreditation: an application fee and an annual accreditation fee. There are two tiers of these fees. The first tier applies to operators of courtesy services, hire and drive services and private services. The second tier applies to road transport passenger services (i.e. route bus and charter services).

The application fee for the first tier is 23.5 fee units. The annual accreditation fee for the first tier is:

$3{\cdot}5 \text{ fee units} \times (B - 1)) + 13{\cdot}5 \text{ fee units}$

—where B is the number of buses proposed to be operated by the service.

The application fee for the second tier is 40 fee units. The annual accreditation fee is:

5·5 fee units × (B – 1)) + 20 fee units

—where B is the number of buses proposed to be operated by the service.

The fee structure used was adopted in order to achieve proportionality between the scale of bus operations and the size of their contribution to regulatory costs. In this sense, a recognition of the need to reflect the notion of capacity to pay in the fee structure can be said to be present.

There are two changes to this under the new regime. The first is that the majority of services to which the current first tier applies will no longer be required to be accredited. Of this group, only commercial courtesy services will require accreditation. The remainder will only require registration, for which no fees are payable. The second change is that the first tier of fees is to be removed, so that all accredited operators are subject to the current second tier of fees. However, the second tier fees have not increased under the new regime.

In practical terms then, there has been an increase in fees payable for operators of commercial courtesy services, while fees have been removed for operators of non-commercial courtesy services, hire and drive services and private and community bus services. The use of a single fee scale under the new regulations reflects a judgement that it is not tenable for different groups of commercial operators to be required to pay fees based on different fee scales.

As noted above, it is proposed to retain the existing fee structure in respect of accredited operators, while fees will not be charged in respect of registered operators, in recognition of their non-commercial status and the lesser degree of regulatory oversight that is expected to be exercised over this group. Thus, annual accreditation fees would continue to be calculated on the basis of the following formula:

Fee = (5•5 fee units × (B – 1)) + 20 fee units

Where B is the number of buses in the bus operator's fleet. Similarly, the fee to accompany an application for initial accreditation will remain at 40 fee units.

Given the reductions expected in the number of accredited operators, annual fee revenue is expected to reduce slightly to $0.6 million under the new legislation. This reflects the expected decrease in the number of accredited operators and the fact that no fees will be charged to registered operators.

Government fees and charges guidelines contain a presumption that fees will be based on full cost recovery principles, with lower fees being justifiable in specific cases in which significant benefits accrue to third parties or whether equity concerns justify fee reductions or waivers.

As noted above, the current level of cost recovery in relation to the costs of bus safety regulation is equal to about 30%, while the impact of retaining the current fee structure in the context of a reduction in the number of accredited operators is expected to be a slight reduction in cost recovery levels to around 26%. This is largely a result of the interaction between the narrowing of the scope of the accreditation requirement on the one hand, with a consequent substantial reduction in the number of accredited operators, and the fact that it has been determined that registered operators should not pay fees. This decision reflects both their generally lower capacity to pay (since most are community based organisations) and the fact that the estimated regulatory cost per registered operator is much smaller than that for accredited operators.

Consideration has necessarily been given to the merits of moving toward setting fees at full cost recovery levels. This issue is discussed in greater detail in Sections 7 and 8, below. However, in broad terms, the option of moving toward full cost recovery based fees has been found to be inappropriate for the following reasons:

- The majority of the additional fee revenue that would be obtained would be likely to be ultimately paid by the government itself, as a result of the terms of the contracts in place between route bus operators and the government. This would mean that the practical benefit of moving to full cost recovery based fees would be relatively small.

- Most of those operators who would be unable to recover the cost to them of the fee increases would be smaller operators. This suggests that there would be distributive concerns associated with a move to full cost recovery based fees. This concern is heightened by the fact that fees based on full cost recovery would be more than three times as large as the current and proposed fees.

- Government already accepts the case for providing substantial subsidies to ensure the provision of route bus services at adequate levels. In this context, the public policy benefit of moving to reduce small regulatory cost subsidies existing implicitly via the fee structure is difficult to identify.

- The significant external benefits associated with the promotion of the bus industry, in terms of the diversion of demand away from private transport and consequent reductions in pollution and congestion, also suggest that the small degree of implicit subsidy that follows from the continuation of fees at less than full cost recovery levels is not inappropriate.

5.11. Summary of expected costs

Table 5.11, below, summarises the expected (gross) costs of the proposed regulations. These expected costs are presented in the table in terms of present values over the expected 10 year life of the proposed regulations. The table also highlights the incremental costs of the proposed regulations. That is, the extent to which the provisions of the proposed regulations (considered in the context of the Act) compare with the costs of the existing regulatory structure.

Table 5.11 summarises the costs of the regulations according to three cost concepts. These are:

- The *gross* costs of the regulations. That is, the total costs incurred in respect of all matters contained in the regulations. In practice, a substantial proportion of these costs would be incurred even were the regulations not made, due to the requirements of the Act. These costs are highlighted in the second column of Table 5.8;
- The *incremental costs* of the regulations by comparison with the costs imposed by the existing regulations. These costs are highlighted in the third column of Table 5.8. This is the best measure of the change in costs that will be incurred by regulated parties in moving from the current regulatory arrangements to the proposed new regulations; and
- The *incremental costs* of the regulations when measured against an unregulated "base case". This is a measure of the additional costs imposed by the proposed regulations by comparison with a situation in which the Act is in place but no regulations are made under the authority of the Act. These costs are highlighted in the fourth column of Table 5.11.

Table 5.11: Summary of identified costs

Item	**Gross cost (PV over 10 years)**	**Incremental cost (current regs)**	**Incremental cost (unreg. base case)**
Devices for school buses	Zero or near zero	Zero or near zero	Zero or near zero
MIS and MMS	$16.5 million	- $7.8 million	$16.5 million
Accreditation applications (incl. renewals)	$3.4 million	-$1.1 million	Zero
Retention of records	Zero or near zero	Zero	Zero or near zero
Applications for registration	$0.2 million	$0.2 million	Zero
Annual bus inspections	$38.9 million	$9.3 million	$8.8 million
Notification/investigation of incidents	Near zero	Zero	Near zero
Costs to government	$20.0 million	Zero	Zero
Total	**$79.0 million**	**$0.6 million**	**$25.3 million**

Gross regulatory costs

The second column of table 5.11. shows that the gross costs imposed by the proposed regulations are estimated to be $79.0 million over 10 years, equivalent to an average of approximately $9.5 million per annum. The costs imposed are quite evenly distributed throughout the life of the regulations, as they relate to maintenance and management practices, rather than imposing capital costs per se.

The largest single component of the identified costs is annual bus inspections. These costs are estimated to total $38.9 million over 10 years, or around half of the total costs identified. The

next largest identified cost is that of developing and maintaining the MIS and MMS that are required to be implemented as a condition of accreditation. These costs are estimated at $16.5 million over 10 years, to which must be added the $3.4 million administrative cost of completing and submitting accreditation applications. The remaining major cost item is that of regulatory costs. These costs are estimated at approximately $2.3 million per annum, plus a one-off cost of $0.9 million incurred in dealing with initial registration applications, or $20.0 million in present value terms over 10 years. These costs are borne, in the first instance, by the Department of Transport. However approximately 26% of these costs, or $0.6 million per annum, are expected to be recovered from the industry in the form of accreditation fees.

Incremental costs (vis-a-vis existing regulations)

The third column of table 5.11 sets out the incremental costs of the proposed regulations as compared with the continuation of the existing legislative and regulatory arrangements. The incremental costs of the proposed regulations, when compared with the existing regulations have a present value of $0.6 million in present value terms over 10 years. This net result reflects the offsetting impact of two major changes in regulatory costs: a $9.3 million increase in the costs associated with annual bus inspections is essentially offset by a $7.8 million reduction in the costs associated with developing and maintaining MIS and MMS and a $2.4 million reduction in the costs associated with accreditation applications (including renewals). As discussed above, the increase in bus inspection costs reflects the expansion in the definition of a bus and the consequent requirement for buses with 10-12 seats to be subject to annual inspections for the first time. Conversely, the reduction in MIS and MMS costs reflects the narrowing of the scope of the accreditation requirement to embrace only commercial operators.

Thus, while overall regulatory costs will be essentially unchanged, these costs will be better targeted than under the current arrangements. A very substantial part of the bus fleet will be subject to annual safety inspections for the first time while, conversely, non-commercial operators, who tend to operate only a very small number of buses and cover relatively few kilometres, will no longer be subject to the same accreditation requirements as large commercial operators, instead being subject to the more limited requirements of the registration process, which are believed to be more applicable to the nature and scale of their operations.

Incremental costs - compared with an unregulated "base case"

The fourth column of table 5.11 sets out to be incremental costs of the proposed regulations when compared with an unregulated the base case. That is, this concept of incremental costs relates to a base case in which the Act comes into effect, with the existing regulations consequently being repealed, but no specific regulations are made under the authority of that Act.

This measure of the incremental cost of the proposed regulations indicates that they would have present value of $25.3 million over 10 years. There are two contributors to this cost total. The first of these is the $8.8 million cost of annual bus inspections. These costs relate entirely to the costs of inspecting buses that are operated by registered operators. This is because, in the absence of any specific regulations being made, the provisions of section 19 of the Act would operate to require that all buses operated by accredited operators would

need to be inspected annually. Thus, bus inspection requirements in relation to this group of operators are not changed by the making of the regulations. Conversely, section 19 is silent in relation to inspection requirements for buses operated by registered operators. Therefore, the costs of the annual inspection requirements of these buses, as established in the proposed regulations, are attributable to the regulations themselves rather than to the Act.

The second component of this incremental cost of $25.3 million over 10 years is the cost of establishing and maintaining MIS and MMS. As discussed above, the requirement to establish and maintain these systems is established in the regulations, rather than the Act. Therefore, the associated costs are also entirely attributable to the regulations. The cost of the MIS and MMS requirements is estimated at $16.5 million in present value terms over 10 years. It should be noted that this is a gross cost, implicitly containing an assumption that MIS/MMS would not be developed by operators in the absence of the proposed regulations. This can be considered to be a conservative assumption, in the absence of usable estimates of the extent to which operators may choose to carry out similar activities in the absence of these regulatory requirements. The context is one in which similar regulatory requirements have been in place for well over a decade. Hence, the counter-factual situation is inherently almost impossible to establish.

It is assumed that the regulatory costs that would be incurred by Department of Transport would be essentially unaltered in the absence of the proposed regulations, since the regulatory duties to be carried out are essentially contained in the Act. Indeed, given the need to rely more heavily on the Safety Director's discretionary powers in the absence of specific regulations, it is possible that the regulatory costs incurred by the Department of Transport would be higher in this base case.

Conclusion

The gross costs of the proposed regulations have been estimated at $79.0 million. However, the great majority of these costs would continue to be incurred even were the proposed regulations not to be made, as a result of the requirements of the Act and the expected use of the discretions provided to the Safety Director to assist in meeting those requirements. Thus, the incremental costs of the regulations, assessed against an unregulated base case, are estimated at only $25.3 million over ten years in present value terms. These incremental costs essentially relate to the requirement of the regulations for buses operated by registered operators to be inspected annually.

The incremental costs of the proposed regulations by comparison with the existing regulatory requirements are estimated at $0.6 million over 10 years in present value terms. Hence, regulated entities as a whole will incur only minor additional costs as a result of the adoption of the proposed regulations.

5.12. Cost impacts on specific sectors and operators

Commercial operators

Within these global impacts, the cost implications for different regulated groups can be highlighted. From the point of view of commercial operators, there will be little net change in regulatory costs. Those commercial operators who operate minibuses will be required to

ensure that these are inspected annually for the first time, at an average cost estimated at $202.10 per bus. This is likely to constitute only a very small proportionate increase in the total inspection costs that they incur, since minibuses would be expected to constitute only a small proportion of their total fleet. Moreover, as discussed above, the average inspection cost for a minibus is less than half of that for a large bus. Commercial operators will also benefit in future from small regulatory cost savings resulting from the fact that, after initially renewing their accreditation under the new legislative arrangements, and it will no longer be necessary for them to renew their accreditation on a five yearly basis.

Currently accredited non-commercial operators

Non-commercial operators who operate buses capable of seating 13 or more persons are currently required to be accredited. This group, estimated to number almost 500 in total, will benefit from significant regulatory cost reductions as a result of the fact that they will be eligible to move from accredited operator status to registered operator status. As discussed above, this will mean that they will reap cost savings as a result of no longer being required to establish and maintain MIS and MMS and undertake explicit risk management-based activities as required by those documents.

Non-commercial operators of minibuses

Non-commercial operators who currently operate only 10 to 12 seat buses will be brought within the regulatory regime for the first time. This group has been estimated to number more than 3000 operators. As they will be regulated for the first time, they will clearly experience increased costs. However, because the registration system has been specifically designed to be proportionate and appropriate to the operations of non-commercial operators (e.g. schools and community groups) the size of these additional costs will be modest.

The costs involved are twofold. Firstly, there is the one-off cost of completing the relevant registration form and lodging it with the regulator. This has been estimated to require only approximately 0.5 hours of an operator's time. Secondly, operators will be required to ensure that each bus is inspected annually. The cost of this inspection has, as noted above, been estimated as $202.10 in total. However, it should be emphasised that this total is derived from the direct cash cost of having the bus inspection carried out, of $100, and the staff time required to convey the bus to the inspection facility and return it. In many cases, the time involved will be donated by a volunteer. In other cases, it is likely that the time involved will be diverted from other tasks rather than representing an additional cash cost to the operator.

These inspection costs are considered to be reasonable and proportionate in relation to the risks involved and the fact that registered operators will not be required to have systematic risk management systems (e.g. MIS and MMS) in place, unlike accredited operators.

Question for Stakeholders: *Your views are particularly sought on the question of whether the imposition of this inspection requirement on very small scale registered operators would result in any undue burden on this group.*

6. Expected benefits of the proposed regulations

6.1. Overview

The expected benefits of the proposed regulations can be considered from two distinct perspectives. Firstly, the passage of the regulations is necessary in order to operationalise several aspects of the Act, which provides the overall framework for ensuring and promoting the safety performance of the bus industry in Victoria. A substantial proportion of the subject matter of the regulations fits within this context. For example, the provisions relating to accreditation determine what documentation is required to be submitted with an accreditation application, as well as setting the relevant fees. It is also established as a formal condition of accreditation that the regulations as a whole be complied with.

Secondly, the regulations contain a limited number of provisions that are, of themselves, directly connected to the achievement of certain safety related goals. The most significant of these are the provisions of Part 5 of the regulations, which specifically require that all buses must be inspected annually by a licensed bus tester, in accordance with Chapter 6 of the *Road Safety (Vehicles) Regulations 2009*, as well as requiring the bus tester to ensure that the bus complies with all relevant standards and requiring inspectors to supply any requested information to the Safety Director.

6.2. Specific safety related benefits

Given the above, it is clear that a small number of the regulatory provisions can be connected directly with specific safety outcomes, while others can only be viewed as contributors to the benefits attainable through the implementation of the broader system of safety related legislation contained in the Act.

The most substantive example of the former benefit is the implementation of a specific requirement for annual inspections according to detailed criteria, to be undertaken by a licensed inspector. While section 19 of the Act provides a general requirement for buses be expected either annually or at intervals prescribed by the regulations, the specific inspection requirements established in the regulations serve to:

- extend the annual inspection requirements to buses operated by registered operators; and
- establish specific requirements in relation to the annual inspections.

The first of these factors is clearly significant, given that around 3500 buses, or more than one quarter of the total bus fleet, are believed to be operated by non-commercial operators who are already required to become "registered operators" under the new legislation. As the provisions of section 19 of the Act apply only to accredited operators, this substantial part of the bus fleet would not be subject to any inspection requirements in the absence of the proposed regulations. The importance of ensuring regular inspections of this part of the bus fleet is underlined by the fact that registered operators are, by definition, non-commercial and

are likely to be less well-placed to ensure the maintenance of their buses to appropriate standards than are larger commercial operators, in the absence of such a requirement.

In addition, the fact that the regulations established a civic requirement in relation to annual inspections is believed to be important in ensuring that inspection activity is undertaken by properly qualified inspectors and sufficiently rigorous.

The mechanical condition of the bus fleet is one of the three pillars of bus safety, together with operator competence and driver competence. Regular inspections by a qualified, independent party are widely seen as an important and effective means of minimising the incidence of mechanical faults in the bus fleet. Such inspections have been required by Victorian regulations since the 1990s while, as noted in section 4, equivalent requirements also exist in most other states. While specific data are scarce, PTSV states that the incidence of bus accidents that are due to mechanical defects in the bus is currently extremely low, a factor which is suggestive of the effectiveness of the inspection regime in ensuring that high standards are achieved with regard to this particular aspect of bus safety.

That said, a number of commercial imperatives exist for bus operators to act to ensure the safety of their buses, even in the absence of a specific regulatory requirement for regular inspections to be undertaken. These include the potential for the government as a major contractor of bus services to use the contracting mechanism to ensure good performance, the possibility of legal action for compensation being taken in cases where negligent maintenance practices lead to accidents and harms and the impact of reputational problems on commercial performance were it to become widely known that an operator had a history of poor bus maintenance practices.

In this context, an important indicator of the contribution of the bus safety inspection requirement to the level of performance being achieved is the number of defects being detected by a bus safety inspector during the course of the inspection programme mandated by the regulations. Data from the Department of Infrastructure (now the Department of Transport) published in the 2008 Issues Paper on bus safety indicate that around 40% of buses are issued with defect notices following their annual inspections, although only around 1% are classified as safety critical defects.

These data should also be interpreted in the light of the fact that a key requirement of the Quality Assured Maintenance System which forms a core element of bus operator accreditation requirements, is that each operator must conduct their own bus inspections at intervals of three months or 10,000 km. Thus, the annual inspection requirements established under the regulations constitute a check, or audit, on a more frequent internal inspection regime which is itself established as a regulatory requirement.

These two factors, taken together, suggest that regulatory requirements for the inspection of buses have a substantial role in practice in helping to ensure that the Victorian bus fleet is kept largely free of mechanical defects and that the incidence of accidents arising due to such defects or failures is minimised. However, given the range of contributors to this outcome, as well as see broader context of multiple contributing factors to bus safety performance, it is clearly not possible to quantify this impact.

6.3. Breakeven analysis

As discussed above, the proposed regulations constitute an essential mechanism to operationalise the new legislative structure governing bus safety in Victoria established by the Act. The provisions of the proposed regulations relate to most of the mechanisms established under the Act to maintain and improve bus safety. This includes specifying both administrative and substantive aspects of the requirements for all bus operators to be accredited or registered and establishing specific safety related provisions such as a requirement for hazard warning lights on the school buses and the requirement for annual inspections of all buses.

Given the relatively wide ranging nature of the provisions contained in the proposed regulations and their high degree of integration with the larger regulatory structure established under the act, the anticipated benefits of the regulations are those of maintenance and further improvement in the overall level of safety achieved by the bus industry as a whole. As discussed above, bus travel constitutes one of the safest forms of transport, while the safety performance of the bus sector has improved significantly in recent decades, in line with the improvement experience in other modes of road transport. Moreover, despite significant data limitations, it is clear that the performance of the Australian (and Victorian) bus industries compares favourably with the performance of bus industries in comparable countries.

Nonetheless, significant numbers of fatalities and injuries continue to occur. Consequently, the benefits derivable from maintaining and further improving safety performance are substantial. As noted in section 3.3, above, there was an average of 3.8 fatalities and 54.2 serious injuries per annum on average. It was calculated that the costs associated with this number of fatalities and serious injuries are equivalent to approximately $34.77 million per annum on average. Additional costs inevitably arise as a result of "non-serious" injuries, as well as property damage resulting from bus related accidents. However, it has not proved possible to quantify these costs. Given this, and the fact that the calculated cost of fatalities and serious injuries is considered likely to constitute the largest part of the total costs associated with bus related accidents, this figure has been used in the following breakeven analysis.

The average cost figure of $34.77 million cited above can be compared with the above estimates of the costs of the proposed regulations in two ways.

Firstly, it can be noted that the proposed regulations exhibit a substantial degree of similarity to the existing regulations in this area. Thus, while the cost of implementing the regulations has been estimated at approximately $25.3 million over 10 years (measured against an unregulated base case), or around $3.0 million per annum, the incremental costs of implementing the proposed regulations are estimated at $0.6 million over 10 years, or less than $0.1 million per annum. It is therefore clear that the proposed changes to the existing regulations will yield a net benefit compared with current regulatory arrangements given only a very small-scale improvement in overall safety standards from existing levels.

This outcome is considered to be very likely given the significant improvements in targeting of the proposed regulations, involving the adoption of a less onerous "registered operator" regime for non-commercial operators, together with the application, for the first time, of the requirements for annual safety inspections to buses with 10 to 12 seats. Given that there are

more than 5,500 buses in this category, compared with 7740 buses currently subject to regulation, it is clear that this significant safety related initiative will be applied to a very large sector of the bus industry which has not previously been subject to explicit regulation. Significant safety related benefits are therefore expected to be derived.

The second perspective on the above data relates to the question of whether the regulations, taken as a whole, are likely to yield net benefits to society. In this context, the overall costs of the proposed regulations are relevant. The relevant breakeven calculus is that of whether, in the absence of these regulations, it is probable that the annual cost of bus related accidents would be at least $3.0 million higher than is currently the case. Given that the "baseline" cost figure is currently $34.77 million, this would imply an increase in the accident related costs of $3.0 million/$34.77 million = 8.6%.

That is, the proposed regulations will have a net benefit if it is believed that, in the absence of these regulatory requirements, industry safety performance would be likely to decline by more than or equal to 8.6%. In considering whether or not this is likely to be the case it should be recalled that, in the absence of the proposed regulations, there would be no requirement for operators to design, document and implement risk management-based approaches via the MIS and MMS requirements. Nor would there be any requirements for annual inspections of buses operated by registered operators.

As noted in section 3, above, very substantial improvements in bus safety performance have occurred in recent decades. These have been associated with very significant regulatory changes, occurring over the same period. In this context, the Department of Transport believes that, in the absence of the proposed regulations, the average cost of bus related accidents would be likely to be at least 8.6% higher than is currently the case. Therefore, it is believed that the proposed regulations will confer net benefits on society as a whole.

That said, it must be acknowledged that, while specific data are limited, only a relatively small proportion of bus related accidents are believed to be caused primarily by mechanical factors, whereas much of the focus of the proposed regulatory requirements (in common with the essence of the existing regulatory approach) is on ensuring the mechanical safety of the bus fleet.

In a context in which similar regulatory requirements have been in place for extended periods, it is difficult, if not impossible, to demonstrate that the currently observed low level of bus related accidents due to mechanical causes reflects the efficacy of these regulatory interventions. That is, it is expected that, in the absence of regulation, the incidence of bus accidents due to mechanical defects would be likely to increase significantly. Thus, the Department of Transport believes that the regulatory requirements have had a significant impact in this regard and, by implication, that a failure to retain and, as necessary, expand these regulatory requirements would lead to a deterioration in safety performance in this area.

7. Identification and analysis of feasible alternatives

7.1. Adoption of a random (or targeted) bus inspection program

As demonstrated in section 5, the major cost driver of the proposed regulations is the requirement that all buses be inspected annually by a licensed bus inspector. While inspection of buses by an independent party is seen as an integral element of any effective regulatory regime, it is possible to conceive of alternative approaches to the implementation of an independent inspection requirement. In particular, it would be possible to implement a scheme that, rather than requiring every bus to be inspected annually, subjected all bus operators to a programme of random bus inspections. Such an option would include the possibility of targeting the random inspection process toward those buses, or operators, that were believed to constitute the highest risks, thus potentially improving its efficiency and effectiveness.

Two possible variants of the random inspection alternative can be identified. First, a random inspection requirement could be applied to all operators - i.e. both accredited and registered operators. This approach would, *a priori*, be most likely to be adopted, if the general logic of applying a random (or targeted) approach to inspections were accepted. However, a second variant of this alternative would involve adopting a random (or targeted) inspection programme in relation to accredited operators, while continuing to require that all buses operated by registered operators be inspected annually. This variant of this alternative might be favoured on the basis that, while accredited operators are required to adopt risk management approaches as a major part of their safety based activities, equivalent requirements will not be applied to registered operators. Consequently, for this group, the annual bus safety inspection constitutes a more fundamental element of the overall regulatory approach.

A further issue in this regard is that the regulator currently has relatively little knowledge of the safety performance of the registered operator sector, insofar as it is estimated that three quarters of the operators expected to apply for registration have, to date, not being regulated, since they operate only 10 to 12 seat buses, which have not previously been subject to regulation. Given this, it would effectively be a practical necessity to adopt an annual inspection regime in the early years of the implementation of the proposed regulations, until such time as sufficient information on safety performance and safety issues had been generated to enable an appropriate approach to the implementation of a random (or targeted) inspection regime to be determined.

A random inspection regime is essentially distinguished from a targeted inspection regime in that the latter option involves taking past risk performance and/or other information on risk profiles associated with particular subgroups of operators into account in determining how inspection resources will be directed. This approach has the potential, in certain circumstances, to substantially increase the productivity of the inspection regime. However, it is obviously critically dependent on the quantity and quality of risk-based information available to the regulator, together with the practical ability of the regulator to utilise this information to design a more effective inspection regime.

7.1.1. Expected benefits of the alternative

The effectiveness of any programme of random inspections is highly dependent upon aspects of the programme design. Key factors include:

- The probability of being subject to a random inspection.
- The size of sanctions imposed in respect of non-compliance discovered during random inspections.
- The ability to target the inspection program effectively toward areas of highest risk.

Thus, all things being equal, a higher probability of being subject to inspection is likely to be associated with high compliance levels. Similarly, greater sanctions for non-compliance are likely to create greater incentives to ensure ongoing compliance.

Targeting of inspections can be expected to be more effective than implementing a purely random program of inspections. However, a precursor to implementing such an approach is to identify reliable indicators of greater safety risk. Vehicle utilisation levels, the age of the vehicle, the type of the vehicle and the compliance history of the operator can be used as indicators. Accordingly in the context of bus safety, a likely approach would be for the inspection regime to incorporate both random and targeted elements. Thus, for example, a proportion of inspection resources would be allocated to random inspections, while the remainder would target particular areas of concern. The latter could include adopting a regime of follow-up inspections of operators whose buses had failed previous, random inspections. It might also include responses to information received from the public or other parties. In addition, a targeted inspection regime could conduct a "rolling" inspection programme, focusing on a different category of operator each year.

A random inspection regime has some advantages over an annual inspection requirement that are likely to increase its effectiveness. In particular, random inspections could be conducted on an unannounced basis, or with limited notice being given. Such an approach ensures that inspections are carried out on buses in their operating condition. By contrast, the proposed regulatory requirement for an annual inspection to be undertaken allows the bus operator to choose the time of inspection and thereby provides the opportunity to ensure that issues are addressed prior to the inspection. The implication of this is that buses may be operated for a significant period in an unsafe state, but still pass annual inspections because remedial action is taken prior to the inspection. This is not possible in the case of inspections that are either unannounced, or subject to limited notice periods.

7.1.2. Expected costs of the proposal

A random inspection regime would need to be administered on a somewhat different basis from the proposed requirement for annual inspections are for all buses. Given the need for policy decisions to be made as to how inspection resources would be directed (and, potentially, for these decisions to be revisited on a frequent basis) in order to ensure that appropriate targeting of resources is achieved, it is likely that the regulator would need to take responsibility for the inspection programme.

Moreover, given that inspections would occur as a result of the regulator's discretion, rather than pursuant to a regulatory requirement, there is some question as to whether it would be seen as acceptable for inspection activity to be undertaken on a direct "fee for service" basis[36]. This implies that the inspections budget would need to be determined *ex-ante* and added into fee calculations.

As suggested above, the costs of a random, or targeted, inspection regime will necessarily vary directly with the extent of the inspection activity undertaken. It was estimated in section 5, above, that the cost of undertaking annual inspections of all buses in the regulated fleet would be approximately $38.9 million in present value terms over 10 years. This cost estimate can be used as the basis for the following indicative estimates of the costs of a random inspection regime:

- If 50% of buses were to be inspected annually, on average, costs would be approximately $19.5 million over 10 years (PV), or $19.4 million less than under the proposed regulations;
- similarly, if one third of buses were to be inspected annually, costs would be approximately $13.0 million over 10 years (PV), or $25.9 million less than under the proposed regulations.

Thus, whereas the proposed regulations involve incremental costs of $10.6 million over ten years in present value terms, compared with an unregulated base case, the adoption of this alternative would involve cost *reductions* of between $8.8 million and $15.3 million compared with the unregulated base case. This counter-intuitive result arises from the fact that, in the absence of an alternative inspection regime being specified in the regulations, the Act requires all buses operated by accredited operators to be inspected annually. Hence, the adoption of this alternative form of the proposed regulations would have the practical effect of reducing the total number of bus inspections that would be required under an "unregulated" scenario.

It should also be noted that the above costings are based on the presumption that random (or targeted) inspections would be adopted in respect of both accredited and registered operators. Clearly, if random inspections were adopted for accredited operators only, with all buses operated by registered operators continuing to be required to be inspected annually, the cost savings associated with this alternative would be smaller than indicated above. On the assumption that 50% of all buses operated by accredited operators were inspected annually and all buses operated by registered operators continue to be inspected, bus inspection costs would be equal to $23.8 million in present value terms over 10 years. This represents:

- a reduction of 38.8% in the costs of bus inspections under the proposed regulations, and
- an amount which is $4.3 million higher (in present value terms over 10 years) than under the variant of this alternative which would see random inspections applied to buses operated by both kinds of operator.

[36] That is, because regulators have discretion to increase the number of inspections applied to particular operators, application of a "fee for service" in respect of these inspections would leave open the possibility of operator complaints of victimisation via excessive (and costly) inspection schedules.

These comparisons indicate that there is relatively little difference between the two variants of this alternative (i.e. application of random inspections to accredited operators only or to all operators). This reflects the fact that accredited operators account for both the majority of buses operated overall and the substantial majority of larger buses, which have higher inspection costs.

While the above calculations suggest that an alternative based on random or targeted inspections, rather than annual inspections of all buses, would potentially significantly reduce regulatory costs, two factors suggest that, in practice, the cost savings actually realised may be somewhat less than the above calculations imply.

Targeted inspections

It is implicit in the above that the cost per inspection under this alternative would be the same as that currently being incurred. However, if it were determined that responsibility for the random inspection regime must be taken by the regulator, as suggested above, a significant risk would exist that the average cost per inspection would be higher, at least in the short and medium term. This reflects the fact that the current annual inspection requirement is entirely undertaken by private sector inspectors, who are accredited to undertake this function.

In the case of the implementation of a targeted inspection regime it would be essential for the regulator to be able to exercise a high level of strategic control over the direction of the inspection programme. This fact would create a strong presumption that inspection activity would need to be carried out by the regulator. This, in turn, implies that the regulator would need to establish appropriate systems and processes, recruit and retain appropriate staff and develop and refine the random inspection programme, given that this capacity is not currently in place.

Moreover, an additional implementation issue inevitably arises. As suggested above, the regulator inevitably lacks information regarding the characteristics and safety performance of the majority of that group of operators expected to become registered operators under the new legislation who currently operate only 10 to 12 seat buses and, as a consequence, has not been subject to regulation to date. In order to gather a sufficient information base upon which to design an appropriate regime of targeted inspections to cover this sector, the regulator would either need to undertake substantial field research, or else initially undertake a programme of annual inspections, together with detailed analysis of the data obtained therefrom.

Random inspections

The above factors may not apply in the case of a random inspection regime, as it is potentially feasible that such a regime could be implemented in a context in which accredited private bus inspectors continued to undertake the required inspection activity. In this model the regulator would identify which buses were to be regulated in each time period and contact those operators, requiring them to present their buses for inspection by an accredited inspector.

Nonetheless, significant additional costs would be associated with the implementation of a random inspection-based regime for a different reason. This is that the logic of a random inspection regime necessarily requires that inspections are undertaken with either no notice,

or at most a very limited notice period, being given to the operator. This is because providing a longer notice period, which would enable defects to be remedied prior to the inspection being carried out, undermines the behavioural incentives on which a random inspection regime is based.

However, in a context in which little or no notice of an inspection is provided, a necessary corollary is that significant disruption to bus services will be occasioned. That is, under the current annual inspection regime, operators are able to schedule their operations in such a way that service provision is not disrupted by the inspection requirement. However, in the case of an "inspection without notice", this will in many cases not be possible. Thus, there may be significant revenue losses to operators and significant disruption and loss caused to customers of those operators.

It is believed that the absence of a truly random inspection regime in any of the regulatory arrangements currently implemented by the other Australian States and territories (see section 4.8, above) reflects the significance in practice of the above costs and disruptions.

It should be noted that this issue arises in respect of both a random inspection regime and a targeted inspection regime. That is, to the extent that the efficacy of a targeted regime also relies on inspections being carried out with limited or no prior notice, the likelihood of significant operational disruptions resulting is also present in this context.

It is not considered possible to quantify the additional costs discussed above in connection with random and targeted inspection regimes. However, it is considered likely that these costs would be substantial. Indeed, it is entirely plausible that these additional costs would be sufficiently large as to offset , wholly or in large part, the direct cost savings calculated above in respect of inspection activity *per se*.

7.1.3. Assessment of the alternative

This alternative can be regarded as being consistent with best practice principles of safety regulation, particularly in relation to inspection and enforcement regimes[37]. As discussed above, the use of random (and, potentially, targeted) inspections has the potential to significantly enhance the effectiveness of any given level of inspection activity undertaken.

However, concerns could arise among the general public as a result of the adoption of an inspection regime that implies a significant reduction in the overall amount of inspection activity, by comparison with both the existing regulatory requirements and the requirements contained in the Act. That is, a significant proportion of the public may not accept the likely greater effectiveness of a random or targeted inspection regime and may instead be more concerned with the significant reduction in overall inspection numbers that this alternative necessarily implies. To the extent that this was the case, the adoption of this alternative could entail important intangible costs in terms of a loss of public confidence in the bus safety regime. Any such loss of confidence would be of significant concern to the extent that it led

[37] See, for example: Hampton, P. (2005) *Reducing Administrative Burdens: Effective Administration and Enforcement.* HM Treasury, London. http://webarchive.nationalarchives.gov.uk/+/http://www.hm-treasury.gov.uk/media/7/F/bud05hamptonv1.pdf

to shifts in demand to another transport mode. Substitution towards private vehicles, in particular, would inevitably lead to poorer overall safety outcomes, while also having negative implications in terms of increased congestion, pollution, etc.

It may also be argued that the Act envisages a periodic inspection regime, at least for all buses run by accredited operators, since it establishes a default requirement for annual inspections for all such buses in the absence of a specific regulatory provision being made. On one view, the Department of Transport believes adoption of a random or targeted regime is at odds with this legislative intention.

In sum, for the reasons discussed above, the cost implications of this alternative relative to the proposed regulations are difficult to estimate[38]. Broadly speaking, savings due to reduced numbers of inspections may be largely counterbalanced by the additional costs associated with relocating inspection activity to the regulatory authority and/or the costs of disruptions to the operations of bus operators where a random inspection regime is implemented. Conversely, random and, in particular, targeted inspections are likely to be more effective in encouraging good practice. However, the question of whether public confidence would be adversely affected as a result of a significant reduction in overall inspection numbers is also highly significant.

Stakeholder views are particularly sought on the question of whether a move to random or targeted inspection, which would potentially involve a significant reduction in overall inspection numbers, would be regarded as acceptable and appropriate by the public and by stakeholders more generally.

[38] As noted elsewhere, while the ACT system is formally based on random inspections, PTSV advice is that these inspections are carried out subject to long notice periods, so that the practical impact of this approach does not mirror that associated with a random inspection regime, which is generally operated without prior notice. Given this, the ACT experience is not able to be used as a reliable guide to the performance of a random inspection regime.

7.2. Reduced inspection requirements for registered operators

As discussed above, the requirement for all buses operated by the accredited and registered operators to be inspected annually constitutes a major cost driver in respect of the proposed regulations. Given this fact, consideration was given during the development of the proposed regulations to the adoption of an alternative involving the application of a less stringent inspection requirement to registered operators.

It was considered that a feasible alternative could be to apply an effective inspection frequency for registered operators that would be only half that applicable to accredited operators. This alternative approach could be adopted in one of two ways. First, the regulations could specify that all buses operated by registered operators would need to be inspected at two yearly intervals. Second, the regulations could avoid specifying a particular inspection frequency for these buses and instead provide for a random inspection program to be carried out by PTSV. Under this approach, a target of inspecting 50% of buses operated by registered operators each year would be set, with the cost of this inspection programme being recovered from registered operators via an increase in registration fees.

7.2.1. Expected benefits of the alternative

It must be acknowledged that the safety benefits expected to accrue under this alternative would be somewhat smaller than those achieved under the proposed regulations. This will necessarily be the case since the stringency of the inspection requirements would be reduced. Regular bus inspections are considered to be fundamental to ensuring one of the three main pillars of bus safety, which (according to PTSV) are the mechanical condition of the bus, the competence of the driver and the competence of the operator. Within this context, a reduction in inspection frequency to once every two years must be expected to weaken this "pillar", at least to some degree.

However, the extent of any such reduction in safety benefits must be considered in the context of the other incentives toward the maintenance of good safety performance that are operating on registered operators.

One of these incentives is the need to comply with safety duties imposed on registered operators by the Act. It should be noted that the specific requirements imposed on registered operators via the Act and regulations are limited in extent. In this context, it is arguable that most registered operators will act to ensure that buses are regularly inspected to verify that they remain in a safe mechanical condition, even in the absence of a formal regulatory requirement to do so, since this is the most obvious and appropriate means of acting to carry out their legislated safety duty. That said, in the absence of a regulatory requirement, it is possible that much of this inspection activity would be conducted relatively informally and that inspections would therefore not, in many cases, be carried out by a licensed inspectors. This may have obvious quality implications.

The second important incentive operating in relation to registered operators arises from the nature of the relationship between the operator and the passengers that they carry. Registered operators are, by definition, non-commercial in nature. As discussed in section 5, above,

more than 700 of the estimated 917 buses that are expected to be operated by registered operators will be operated by private operators, with the majority of these constituting school buses. In the context of this type of operator/passenger relationship, there are clearly substantial intrinsic incentives toward good safety performance. In this context, a reduced inspection frequency requirement may not be associated with any significant reduction in overall safety performance.

A further consideration is that buses operated by registered operators are believed to cover substantially smaller distances, on average, than those operated by accredited operators. In this context, the imposition of a lower required frequency of inspection could be seen as constituting an appropriately proportionate approach to the regulation of this sector. That is, the total risk posed by buses operated by registered operators (measured as hazard times exposure) is small in relation to the risks posed by the operations of the bus industry as a whole. Therefore, less stringent regulatory requirements can be justified.

7.2.2. Expected costs of the alternative

As discussed in section 5, above, the cost of requiring annual inspections of all buses operated by both accredited and registered operators is estimated at $4.7 million per annum, or $38.9 million in present value terms over 10 years. Of the estimated annual cost of $4.7 million, $3.6 million relates to inspections of buses operated by accredited operators, while the remaining $1.1 million relates to inspections of buses operated by registered operators.

Consequently, a halving of the effective frequency of inspections for registered operators would reduce annual costs by $0.55 million approximately, by comparison with the proposed regulations. Thus, the annual cost of bus inspections would be equal to approximately $4.15 million per annum, or $34.5 million in present value terms over 10 years under this alternative. This represents a reduction of 11.3% in total bus inspection costs, by comparison with the proposed regulations. However, from the perspective of registered operators, it necessarily represents a reduction of 50% in bus inspection costs.

This latter perspective is also of particular importance when considering the cost of this alternative in relation to the unregulated base case. As discussed above, section 19 of the Act already contains a requirement for all buses operated by accredited operators to be inspected annually, unless an alternative inspection frequency is specified in the regulations. This means that the cost of inspections of these buses is attributable to the Act, rather than to the proposed regulations. Only the cost of inspections of buses operated by registered operators is attributable to the proposed regulations. Moreover, this cost is the only quantifiable cost that has been determined to be specifically attributable to the proposed regulations.

Given that this alternative differs from the proposed regulations only in that it halves the required frequency of bus inspections for registered operators, the total costs that would be incurred under this alternative, measured against the unregulated base case, are equal to $20.9 million in present value terms over 10 years, a reduction of $4.4 million in the estimated $25.3 million cost of the proposed regulations.

7.2.3. Assessment of the alternative

It was noted above that this alternative would necessarily be associated with reduced safety performance, vis-a-vis the proposed regulations, but that the extent of this reduction in safety performance may be relatively small given the other safety incentives operating in respect of registered (i.e. non-commercial) operators. At the same time, the above cost estimates suggest that the regulatory costs attributable to the proposed regulations would be substantially reduced under this alternative.

However, two other considerations must be taken into account. Firstly, the estimated cost reduction must be seen in the context of the broader regulatory framework, embracing the requirements of the Act, as well of the proposed regulations. As indicated in table 5.11, the present value of these costs is likely to be of the order of $79.0 million in present value terms over 10 years. Thus, the reduction in costs of $4.4 million that would occur under this alternative represents a reduction of 5.6% in terms of this broader regulatory cost base.

Secondly, it was argued in section 7.2.1 that a likely response of registered operators to the other safety incentives operating upon them would be that they would voluntarily implement a more rigorous bus safety inspection programme than that which would be required under this alternative. To the extent that this response occurred in practice, the cost savings identified above would not be obtained in practice. However, if a significant amount of this "discretionary" inspection activity were not to be carried out by licensed bus testers, it is arguable that the effectiveness of this inspection activity would be somewhat lower as a result.

These factors call into question the likely effectiveness and efficiency of this alternative. Moreover, it is highly likely that the adoption of this alternative would be considered inappropriate by many people insofar as it implies that a key safety requirement being applied for one category of buses (or, more specifically, buses operated by one category of operator) would be set at a lower level than the standards being required in the remainder of the industry.

Finally, it was indicated at the beginning of this section that two variants of this alternative could be envisaged. While one would imply that each bus would be inspected every two years, the second variant would involve a random inspection regime with an *average* inspection frequency of once every two years. Within this average inspection frequency, it would be expected that the regulator would target the inspection regime in such a way as to ensure that buses operated by those operators with relatively poor safety records would be inspected more frequently. Given the low overall frequency of bus accidents, judgements as to operator safety records would not be based on actual accident frequency but, rather, on past inspection performance (in terms of the number and nature of defects discovered).

The adoption of this variant of the alternative would clearly have the potential to achieve a greater degree of efficiency, involving the safety performance being achieved given the same input of bus inspection resources.

7.3. Requiring five-yearly renewal of accreditation

The current legislative and regulatory arrangements in respect of bus safety require that accredited operators renew their accreditation at five yearly intervals. Moreover, because the existing arrangements require both commercial and non-commercial operators to be accredited, this five yearly renewal arrangement applies both to those operators who will continue to be accredited operators under the new legislation as well as to those who will become registered operators.

Given this current practice and the observation that renewal of accreditation is required in a number of other Australian states (see section 4), consideration was necessarily given to the alternative of retaining a requirement for five yearly renewal of bus operator accreditation.

7.3.1 Expected benefits of the alternative

This alternative would be expected to have additional benefits, vis-a-vis the proposed regulations, in that it would provide a mechanism by which the regulator would be able to review the adequacy and appropriateness of the MIS and MMS on which operators rely, as well as other factors relevant to their ongoing accreditation. Thus, a benefit of this alternative would be that it provides a mechanism for ensuring that these documents, which set out operators' risk management approaches, remain appropriate to their operations over time.

However, in assessing the likely size of the additional benefits likely to be achieved through this mechanism, consideration must be given to the alternative means of ensuring ongoing compliance that also exist under the Act and proposed regulations. In particular, PTSV undertakes an ongoing program of audits of accredited operators and will continue to implement this program under the new legislation and regulations. It is anticipated that approximately 500 operator audits will be conducted per annum, equivalent to approximately 50% of the expected number of accredited operators being audited each year.

Given this very high level of audit-based activity, it is not considered likely that the continuation of a requirement for five yearly renewal of accreditation and/or registration would yield appreciable additional benefits in terms of the degree of assurance of ongoing compliance with operator requirements. Therefore, the expected benefits of this alternative are not expected to diverge substantially from those of the proposed regulations.

7.3.2 Expected costs of the alternative

As indicated in table 5.11, above, the average administrative costs to accredited operators of applying for renewal of accreditation was estimated at $608.18, on the basis of the questionnaire responses received. Given that it is anticipated that approximately 1,000 operators will be subject to accreditation under the new legislation (and the proposed regulations), this would imply that approximately 200 operators would need to renew their accreditation, on average, each year during the expected 10 year life of the proposed

regulations. Therefore, the expected annual cost to operators of completing the administrative requirements associated with renewing accreditation can be calculated as:

$608.18 x 203 = $112,460

In addition, PTSV would incur additional regulatory costs associated with the assessment and processing of accreditation renewal applications. PTSV estimates that the cost of assessment of an application for initial accreditation is equal to $1,576 on average[39]. The cost of assessing an application for renewal of accreditation is believed to be approximately half of this amount, or $788, on average, since a number of tasks do not have to be carried out during renewal, or require only checking and/or updating of previously supplied information. On this basis, the average costs incurred by the regulator in assessing renewal applications would be equal to:

$788 x 203 = $159,964

Thus, the total annual costs associated with requiring five yearly renewal of accreditation would be equal to:

$112,460+ $159,964= $272,424

This is equal to $2.2 million in present value terms over 10 years. This constitutes the additional costs associated with this alternative, vis-a-vis the proposed regulations. As noted above, the expected costs of the proposed regulations, measured against the unregulated base case, totalled $25.3 million in present value terms over 10 years. Hence, the total cost of adopting this alternative would be equal to $27.5 million over 10 years in present value terms. This is equal to an increase of 8.7% on the cost of the proposed regulations.

Considered alternatively, while the costs of the proposed regulations are expected to be $0.6 million higher, in present value terms over 10 years, than those associated with the existing regulatory requirements, the cost of adopting this alternative would be equivalent to that of the existing regulations.

7.4. Full cost recovery based fees

As discussed above, the regulatory costs expected to be incurred in administering the new bus safety legislation, including the proposed regulations, are of the order of $2.3 million per annum, while the proposed fee structure will yield only around $0.6 million in fee revenue per annum. By contrast, the starting presumption contained in the Department of Treasury and Finance *Cost Recovery Guidelines* is that regulatory fees will be set at levels that ensure that regulatory costs are fully recovered from the regulated industry. Given this, consideration was given to the alternative of setting fees at full cost recovery levels.

[39] The cost of this activity is currently estimated at approximately $0.4 million annually, with an average of 300 renewal applications and 100 applications for initial accreditation being received. The latter are estimated to require twice the input of the former. Hence average cost is $788 for assessment of a renewal and $1,576 for assessment of initial application for registration. [i.e. (300 x $788) + (100 x $1,576) = $394,000]

7.4.1. Expected benefits of the alternative

In general terms, levying full cost recovery based fees is regarded as being economically efficient, as it ensures that the costs of regulating an industry are borne by producers and consumers of that industry's output. This means that decisions about how much to produce and consume are made on the basis of an understanding of the full costs associated with the production of the industry's output and thus avoids the economic distortions that occur where there is an effective subsidy of industry output.

In the regulatory context, if taxpayers generally fund the regulation of an industry, there is a subsidy from taxpayers to producers and consumers of that industry's services. Thus, setting fees at lower than cost recovery levels means that a subsidy is provided to bus users and to bus operators from the general budget revenue. Setting fees at full cost recovery levels has the benefit of eliminating this subsidy.

However, the size of such a benefit may be small in the context of the bus industry, for two reasons. First, it is widely accepted that it is appropriate that the government provide subsidies for the provision of public transport services, both on equity grounds (i.e. to ensure adequate access to transport, as a basic service, for all citizens) and on efficiency grounds. The latter relate to the fact that there are numerous negative externalities associated with the use of private transport (e.g. environmental harms, congestion costs), which can be reduced to the extent that consumers substitute their demand toward public transport. The provision of subsidies tends to encourage such substitution. In Victoria, as in almost all jurisdictions, the government provides substantial subsidies for the provision of route bus services, which constitute easily the largest single part of the bus industry. In this context, a move to reduce the small, implicit subsidy which arises due to the provision of regulatory services at low (fee) costs would be likely to achieve very little in the way of benefits.

Second, the nature of the contracts that exist between the government and route bus service providers is such that the great majority of any such fee increase would, in any case, be likely to be passed directly back to government. That is, an increase in regulatory costs would be likely to lead to a claim for an adjustment to the subsidies paid to route bus operators.

7.4.2. Expected costs of the alternative

The adoption of full cost recovery based fees would necessarily increase the fees paid by bus operators very substantially from current levels. Fees would need to increase by approximately 283%, on average, in order to increase revenue from the currently expected $0.6 million per annum to the required amount of $2.3 million per annum. The following table provides indicative examples of the implications of such a fee increase for operators of different sizes.

Table 7.1: Notional annual accreditation fee comparison - proposed vs cost recovery based fees

Number of buses	Existing fee	Cost recovery based fee	Increase
1 bus	$233.80	$896.16	$662.36
10 buses	$812.46	$3,114.16	$2,311.70
50 buses	$3,384.26	$12,971.87	$9,587.61

Table 1 indicates that the fee increases in question would be extremely large. Moreover, there would be equity issues, in that route bus operators would be likely to be able to recover much or all of the fee increase from government, while operators of other kinds of bus services would pay these additional costs themselves. This equity issue would potentially have very significant impacts, given the probable need to undertake a restructuring of the accreditation fee under a full cost recovery based model: while Table 7.1. provides an illustration of the impact of increasing fee revenue to full cost recovery levels based on the existing fee structure, such a move would, in practice, be likely to require a restructuring to avoid over-recovery of costs from particular groups of operators.

This issue arises because there is currently a linear relationship between the fee paid and the size of the bus operator's business (i.e. the number of buses operated), whereas there is a significantly less direct relationship between the extent of regulatory resource costs and the size of an operator's business. PTSV believe that the costs of undertaking operator audits (which, as shown in Section 5, constitute the largest expenditure item for the regulator) are somewhat larger in the case of larger operators but do not vary proportionately with the number of buses operated. Thus, in the event that full cost recovery fees were to be adopted, a restructuring of fees would need to be considered, which would see smaller operators bearing a larger part of the fee burden.

As an illustration of the possible extent of the fee increases that would be faced by small operators in such a scenario, the annual regulatory costs of $2.3 million can be divided by the total number of accredited operators, which is expected to be approximately 1000 under the new legislative arrangements. This implies that the average fee that would need to be charged per operator under a scenario in which these are set at full cost recovery levels would be approximately $2,300. This figure can be compared with the existing fee for an operator of a single bus of $233.80 and the full cost recovery fee, on the assumption of a continuation of the current fee structure (as set out above) of $896.16.

In practice, if fees were to be set at full cost recovery levels, new formula would be required which retains some degree of proportionality between the scale of an operator's business and the fee charged, but which resulted in substantially less variability in fees than is currently the case. Development of such a formula would require significant analysis of the cost of existing (and future) regulatory activities to be undertaken. Given the uncertainties about how much regulatory effort will be applied to the different sectors under the new regulatory regime, conducting that analysis would not be warranted at this stage. Nonetheless, as outlined below, the Department of Transport will collect data to enable an assessment of the appropriateness of the fee structure to be assessed as part of its five-yearly review of the Regulations. However, it can be stated that the fee that would be likely to be charged in respect of an

operator of a single bus would be substantially higher than $896.16, but somewhat lower than $2,300.

Equally, the implication of the above in relation to larger operators is that they would be likely to see relatively limited increases in the fees that they currently pay as a result of the adoption of a policy of setting fees at full cost recovery levels. Thus, for example, the average cost recovery based fee of $2,300 per operator can be compared with the existing fee paid by an operator of a 50 bus fleet of $3,384.26.

In sum, the adoption of full cost recovery based fees would lead to an increase in gross fee revenues of around $1.7 million per annum, almost all of which would be collected from smaller bus operators. Moreover, as discussed above, the net increase in fee revenues would be significantly smaller than this amount, due to the expected ability of holders of the bus service contracts to pass on any cost increases that they incurred to the Government under existing contractual arrangements.

8. Conclusion

8.1. Overview and break-even analysis

The proposed regulations are essential to operationalise the new legislative arrangements governing bus safety in Victoria that have been established via the Act. The regulations establish a range of specific requirements in relation to the obligation on all commercial operators to be accredited, which is established by the Act. These include a requirement to establish and maintain Management Information Systems and Maintenance Management Systems and a requirement to retain all relevant records for a set period. In addition, the regulations require all buses to be inspected annually by licensed bus testers, require all school buses to be fitted with hazard warning devices and establish administrative requirements in respect of applications for both accreditation and registration.

The gross costs identified above in respect of the proposed regulations are significant, at $79.0 million in present value terms over 10 years. However, the majority of these costs are appropriately attributed to the Act itself rather than the regulations, particularly in relation to the cost of annual inspections. Thus, the costs of the proposed regulations, when measured against an unregulated base case, are only $25.3 million dollars over 10 years, while the incremental costs of the proposed regulations, when measured against the existing legislative and regulatory arrangements are estimated at $0.6 million over ten years.

As discussed above, quantification of the expected benefits of the proposed regulations has not proved possible. However, the application of a breakeven analysis indicates that, on reasonable assumptions, the proposed regulations can be expected to yield a net benefit. Specifically, were bus safety performance to decline by more than approximately 8.6% in the absence of the regulations, the additional costs incurred would more than outweigh the costs of the proposed regulations.

The requirement for annual inspections of all buses is considered to be an important mechanism for ensuring that appropriate maintenance standards are followed by a bus operator and, consequently, is expected to lead to the achievement of significant benefits. The inspection requirement will only be applied to buses operated by accredited operators if the regulations are not made.

Around 4,000 buses are estimated to be operated by non-commercial operators who are expected to become registered operators (cf accredited operators) under the new legislation. Given this, the application of an annual inspection requirement to these buses via the proposed regulations is expected to yield important safety benefits. That said, data on the current performance of this sector is not sufficient to provide a quantitative basis for this presumption. In addition, the requirements contained in the regulations requiring all accredited operators to develop and maintain MIS and MMS are also considered to be major contributors to good operational practice in the bus industry.

That said, it was noted in section 6 that only a small proportion of bus related accidents are primarily caused by mechanical failure. However, there is some evidence to suggest that those accidents that are due to mechanical failure tend to be relatively high consequence accidents. A recent risk analysis conducted for PTSV reported that 15 identified incidences of brake failure leading to bus crashes between 1970 and 1993 were associated with a total of 41 fatalities in 103 serious injuries[40].

Moreover, it can be speculated that this is, in itself, a reflection of the success of the long-standing regulatory arrangements in relation to bus safety and that, in the absence of these regulatory requirements there would be significantly more bus accidents caused by mechanical defect. However, it is clearly not possible to demonstrate that this is the case and, by implication to demonstrate that continued regulatory action in this area will yield net benefits.

In this context, a number of factors can be cited in support of the decision to proceed with the regulations. First, the regulations largely serve to operationalise the Act and deal with subject matter in ways that are clearly envisaged by the primary legislation. In this context it can be noted that the approach to bus safety regulation adopted in Victoria is broadly consistent with that adopted throughout Australia and in many comparable countries, while Victorian bus safety performance compares very favourably with that of comparable jurisdictions. This suggests that Victoria's approach to bus safety regulation is consistent with best practice.

Second, while the majority of the specific regulatory provisions being adopted are essentially focused on ensuring the mechanical safety of buses, it is also considered that a broad impact of the adoption of a comprehensive system of bus safety regulation will be to contribute to the development and maintenance of a "safety culture" among bus operators, with positive impacts on other aspects of bus safety performance consequently arising as an indirect result of the adoption of the proposed regulations.

Third, the continuation a comprehensive and effective regime of bus safety regulation is considered essential to the maintenance of public confidence in buses as a safe mode of transport. This maintenance of public confidence is essential if there is not to be any substitution away from the use of buses and toward other, less safe modes of transport, such as private vehicles. Indeed, the Government's public transport strategy is predicated in part on an increase in bus use. Thus, the maintenance of confidence in the bus industry is important to the achievement of other policy objectives related to the success of the bus industry, including minimising congestion and pollution.

Considered from an incremental perspective, the new regulatory arrangements are expected to lead to only a very marginal increase in overall regulatory costs when compared with the existing regulatory structure. Thus, provided there is a very small scale improvement in current bus safety performance, the net impact of moving to the new arrangements from the existing regulatory requirements will be positive.

Given the above, the Department of Transport believes that the proposed regulations will result in net benefits to society.

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[40] ***Report for Bus Operator Auditing Program Development: Bus Risk Assessment and Audit Report.*** December 2008. Report Prepared for Public Transport Safety Victoria by GHD consultants.

8.2. Multi-criteria analysis

Given that it has not been possible to quantify all of the expected benefits and costs associated with the proposed regulations and that uncertainty also attaches to the breakeven analysis presented above, the proposed regulations and the identified alternatives have also been subjected to a supplementary assessment via the use of Multi-Criteria Analysis, as recommended in the Victorian Guide to Regulation.

Three criteria for assessment have been identified. The first of these is that of regulatory effectiveness, defined as the ability of the regulatory proposal to achieve the identified regulatory objectives. The second criterion is that of regulatory cost minimisation, while a third criterion is that of the maintenance of the practicability of implementation of each option. Each of these criteria is implicitly accorded an equal weighting. This reflects a view that each is fundamental to the performance of a bus safety regulatory regime. Considered alternatively, there is a presumption against the application of explicit, differentiated weights to assessment criteria which should be abandoned only where there is a clear argument in favour of weighting one or more criteria more heavily.

Table 8.1, below, assesses the proposed regulations against the first three alternatives discussed in section 7, using the above criteria. The final alternative considered in section 7 has not been assessed according to these criteria, as it differs from the proposed regulations only in adopting a full cost recovery based fee structure. The proposed regulations are assessed against this alternative via a separate, qualitative assessment.

Each of the alternatives assessed via the MCA is scored against each criterion on a scale of -5 to +5, with the scores being assessed relative to the base case of having no regulation (ie relying entirely on the provisions of the Act, including the exercise of the powers and discretion is given to various offices under that legislation).

Table 8.1: multi-criteria assessment of regulatory alternatives

	Proposed regulations	**Random or targeted inspections**	**Reduced inspections for registered operators**	**Renewal of accreditation**
Regulatory effectiveness	2	2	1	2
Regulatory costs	-2	-1	-1	-3
Practicability of implementation	5	-1	4	5
Total	**5**	**0**	**4**	**4**

Table 8.1 shows that the proposed regulations received the highest total score across the three assessment criteria, with a score of five points. However, alternative two, which differs from the proposed regulations in requiring a lower frequency of bus inspections for registered operators, and alternative 3, which differs from the proposed regulations in retaining a

requirement for five yearly renewal of accreditation, both score only slightly lower, with four points. Alternative one, that of adopting random or targeted inspections, scores zero points. The basis for determining the scores allocated to each alternative in relation to each criterion is discussed below.

The following summarises the assessments of each alternative against each of the identified criteria. It must be noted, however, that data limitations create significant difficulties in assessing the likely performance of a number of the options against some criteria.

Regulatory effectiveness

All of the alternatives receive similar scores against this criterion, with scores of one or two points being awarded in each case. These scores are positive, but relatively low, reflecting the fact that the majority of the substantive regulatory provisions are contained in the Act, including a requirement for all accredited operators' buses to be inspected at annual intervals.

A significant reason for the allocation of positive scores is that each of the alternatives includes a requirement for the inspection of buses operated by registered operators, whereas such a requirement is absent from the Act itself. Alternative 2 receives a lower score because it involves a lower inspection frequency for this group. Alternative one, which would involve random or targeted inspections as opposed to annual inspections, is considered to be likely to yield a similar degree of regulatory effectiveness to that achieved by the proposed regulations and, as a result, receives the same score of two points. Option three, which differs from the proposed regulations in requiring five yearly renewal of accreditation also scores two points. This reflects the fact that it is not believed that requiring renewal of accreditation will materially contribute to overall regulatory effectiveness.

Cost minimisation

All of the alternatives would be expected to result in higher costs than would be incurred under the base case. The alternative of adopting a random or targeted inspection regime would, *a priori*, be expected to entail lower costs than in the base case, given the existence of an annual bus inspection requirement in the Act. However, as discussed above, the additional costs associated with implementing a random or targeted inspection regime (that is, costs over and above the direct costs of the inspections themselves) are considered to be sufficiently important as to suggest that overall costs would be higher than in the base case context of annual inspections being required for buses operated by accredited operators and no inspections being required in respect of buses operated by registered operators.

It was also noted in section 7, above, that these indirect costs are sufficiently uncertain as to raise a question as to whether the overall costs of this alternative would be less than, equal to, or potentially greater than those associated with the proposed regulations. On balance, it is considered likely that the overall costs associated with a random or targeted inspection regime would be slightly lower than under the proposed regulations. Consequently, this alternative receives a score against this criterion, of -1, while the alternative of adopting annual inspections in respect of accredited operators and a lower inspection frequency in respect of registered operators also scores -1.

The proposed regulations received a score of -2, while the alternative of requiring renewal of accreditation receives the lowest score of -3 points.

Practicability of implementation

The third criterion, that of practicability of implementation, assesses the alternatives in terms of the initial and ongoing difficulties associated with adopting and implementing each option.

Three of the alternatives receive a positive score vis-a-vis the base case of implementing the Act without any specific regulations being made. This reflects the fact that specification of a range of concrete requirements is believed to facilitate the implementation of the provisions of the Act, enhancing certainty for operators and other stakeholders and reducing administrative burdens on the regulator. In the absence of specific regulations, a large number of matters would need to be specified in policy statements, Directives from the Safety Director, guidelines or other such materials. This would be likely to increase cost and uncertainty and raise doubts about equality of treatment.

The proposed regulations and the alternative of requiring renewal of accreditation score equally against this criterion, notably because the latter alternative would simply involve the continuation of existing practices in relation to renewal of accreditation, with relevant systems and procedures already being in place. The alternative of adopting reduced inspection requirements for registered operators scores slightly lower, reflecting the fact that there would inevitably be some increase in administrative complexity involved in adopting different inspection regimes for different classes of bus operator. That is, inspection regimes for the two types of operator would need to be managed separately to some degree, since different substantive requirements would apply.

The final alternative, of adopting random or targeted inspections, scores substantially lower than the other three alternatives, for a number of reasons. Firstly, particularly if a targeted inspection regime were adopted, this would be likely to require the establishment of an inspection capacity within the regulatory agency. Secondly, potential concerns as to possible negative impact on public confidence have also been identified. Third, it was noted that the adoption of a targeted inspection regime requires the regulator to develop adequate data on industry and sectoral risk characteristics and performance and use these to design an inspection regime. Particularly given current data limitations, this is likely to constitute an important barrier to the ability to implement this alternative. Finally, it was noted that the adoption of a truly random inspection regime would be likely to cause significant disruption to those operators and their customers where buses are required to be submitted to inspection with little, if any, notice.

The result of the MCA is therefore that the proposed regulations are preferred to all of the first three alternatives considered. However, the proposed regulations must also be compared to the fourth alternative, of adopting cost recovery based fees for accredited operators.

As discussed in section 7, there is, by virtue of the DTF Cost Recovery Guidelines, an initial presumption in favour of adopting regulatory fees that recover fully the cost of regulatory administration. However, in the specific case of the bus industry, it was noted that the majority of the additional fee revenue that would be obtained through the adoption of full cost recovery based fees would ultimately be paid by the government itself, as a result of the terms of the contracts in place between route bus operators and the Government. This would

mean that the practical benefit of moving to full cost recovery based fees would be relatively small. A related point is that Government already accepts the case for providing substantial subsidies to ensure the provision of route bus services at adequate levels.

Moreover, most of those operators who would be unable to recover the cost to them of the fee increases would be smaller operators. This suggests that there would be distributive concerns associated with a move to full cost recovery based fees. This concern is heightened by the fact that fees based on full cost recovery would be more than three times as large as the current and proposed fees.

Finally, given the significant external benefits associated with the promotion of the bus industry, in terms of the diversion of demand away from private transport and consequent reductions in pollution and congestion, it is considered reasonable to accept the small degree of implicit subsidy that follows from the continuation of fees at less than full cost recovery levels.

Given the above factors, the proposed regulations are preferred to the alternative of adopting full cost recovery based fees.

9. Implementation and enforcement

The *Victorian Guide to Regulation*, a guideline made under the authority of the **Subordinate Legislation Act 1994**, requires that Regulatory Impact Statements (RIS) should include a discussion of the means by which proposed regulations will be implemented, evaluated and reviewed over time.

Specifically the Guide requires that the RIS considers what is required to practically implement the proposed regulations, including discussion of any transitional arrangements that may be necessary to minimise the initial impact of the preferred option or to allow time for supporting business systems (e.g. Information Technology systems needed to support registration and licensing systems) to be developed, trailed and tested.

The Guide also requires the RIS to include an explanation of how proposed regulations are to be enforced, including an identification of all the departments and agencies that will have a role in administering and/or enforcing the preferred option.

Implementation

As noted in the consultation section, the process of development of the proposed regulations has been an extensive one, covering the period since March 2009 when the Act was passed. As would be expected, stakeholder awareness and understanding of the proposed regulations has improved during this period, particularly in recent months as details have been progressively settled.

In consultation with regulatory authorities and industry stakeholders, the DOT has scoped the required tasks for implementation of the proposed regulations. These tasks, which will be carried out by DoT and/or PTSV, include:

- Development and provision of extensive guidance materials.
- A communication strategy to ensure that there is a widespread awareness of the proposed regulations, what is needed to comply and by when.
- Investigation into availability of relevant safety courses for the purposes of gaining accreditation as an accredited bus operator[41];
- Training for officers and inspectors involved in enforcing the new requirements, for example, training and workshops on ‘So far as is reasonably practicable’).
- Changes to business systems necessary to support changes implied by the proposed regulations, for example, improved access to data and information on accidents involving buses.

[41] Although completion of a training course will no longer be mandatory under the new legislative arrangements, industry (BusVic) is supportive of operators undertaking the course. It is considered likely that most operators will continue to undertake the course.

• Review, as appropriate, of requirements of relevant Government contracts for the provision by accredited bus operators of bus services and pre-requisites in respect of such contracts.

These tasks will be performed primarily by PTSV and comprise a mix of business-as-usual and ad hoc tasks. They will be carried out within the budget set out in Section 5, above.

The commencement date for the proposed regulations, if approved, will be 31 December 2010.

The timing of commencement on this date will enable the tasks required to support successful implementation of the proposed regulations to be completed.

Enforcement

The proposed regulations would be enforced by PTSV who are expected to be involved in monitoring compliance with and enforcing the proposed regulations.

Because compliance monitoring, enforcement activities and sanction levels are relevant to the determination of costs and benefits (in terms of regulatory effectiveness) the specific detail of how compliance with the proposed regulations would be monitored and enforced has already been discussed in preceding sections of this RIS.

PTSV currently collects and analyses compliance information and bus incident data, and this will continue to occur under the new regulatory regime governing bus safety.

In addition to data currently collected, under the new regime PTSV intends to collect information and data relating to, or supplied by, bus operators (both registered and accredited) as follows:

- information supplied through the application process, including information on the roadworthiness of buses,
- data collected during scheduled audits and/or compliance activities,
- data collected from licensed bus testers through the annual safety inspection regime,
- data collected following bus incidents (note that all bus operators will be required to report bus incidents as defined in the BSR to PTSV); and
- information received through PTSV's public complaints process.

Equivalent data are currently collected in respect of accredited operators. Under the new regulatory regime, this data collection will also extend to registered operators.

Under the BSA / BSR, PTSV intends to analyse data from annual safety inspections for both registered and accredited bus operators to gain an in-depth understanding of the safety profile of vehicles in these respective categories. PTSV is particularly interested in collecting roadworthiness information on small buses (10-12 seats), given the dearth of information currently available on this sector.

Compliance and enforcement

PTSV audits accredited operators in accordance with an audit schedule. Operators are required to assist audits by making records and a staff member/s available. The staff time

required will depend on the size of the bus operation. PTSV estimate that the staff time required will range between 1 and 6 hours[42].

Adverse findings resulting from an audit may result in issuing of non-compliance reports, and disciplinary action such as suspension of accreditation.

Under the new regulatory regime, PTSV will continue to audit *accredited* bus operators according to an audit schedule. If breaches of the legislation are identified through the audit process, PTSV will have a greater range of enforcement options (as set out in Part IV, Division 7 of the **Transport Act 1983** (Vic)). Section 50 of the Act sets out the following disciplinary actions which can be taken against an accredited operator:

- reprimand,
- imposition of additional conditions of accreditation;
- suspension of accreditation
- impose or vary an expiry date on accreditation;
- vary the conditions or scope of accreditation;
- cancel the accreditation; and
- disqualify the operator from applying for accreditation.

PTSV will not audit *registered* operators on a scheduled audit cycle. Rather, PTSV will monitor the performance of registered operators through information and intelligence gained from a number of sources, including:

- other road-related regulators, such as VicRoads, VicPolice, VTD,
- bus industry participants, including other accredited / registered operators;
- licensed vehicle testers; and
- members of the public.

If breaches of the Act and/or regulations are detected through these compliance activities, PTSV will have a greater range of enforcement options (as set out in Part IV, Division 7 of the **Transport Act 1983** (Vic)) (see above).

[42] Given that most operators are relatively small in size, an average staff time estimate of 2 hours is considered reasonable. At the $51.05 hourly labour cost cited elsewhere in this document, this implies that operators who are accredited will need to divert staff time valued at $102.10 to assist in audit compliance activities. On average. PTSV will conduct 500 audits annually, implying aggregate costs of $51,050.00 per annum to accredited operators. Because compliance monitoring of registered operators is a new regulatory field, it has not been possible to estimate the costs to registered operators associated with this activity. However, these costs are expected to be smaller than those estimated for accredited operators in relation to auditing."

10. Evaluation strategy

An important feature of best practice regulation is that it is reviewed regularly to ensure that it still represents the most appropriate means of meeting the specified objectives. In order to monitor the effectiveness of the preferred regulatory option, an evaluation or review strategy is required. The Guide requires that the RIS includes information on the proposed evaluation or review strategy.

The Department of Transport recognises that a systematic approach is required to ensure that transport regulations are kept up to date and effective.

Important issues considered when determining this approach included:

(a) how and by whom proposals for maintenance are to be initiated, considered and responded to;

(b) how urgent issues are to be dealt with;

(c) the cycle, priorities and process for the evaluation of the implementation of regulatory reforms; and

(d) how and when the periodic reviews of relevance and effectiveness of the reforms are to be conducted.

The DOT adopts an approach that requires it to take actions in the short, medium and long term.

Maintenance

Maintenance is the term applied to refer to the amending and updating of regulations as need arises. DOT is reviewing its process for maintenance activities. This process may include: establishing appropriate webpages (forming part of the Department's internet site) that can be used by transport agencies and other interested parties to lodge submissions regarding perceived problems with existing regulations (or the lack thereof) and proposals for new regulations or changes to existing regulations (to address the identified problem).

Properly made submissions would then be formally considered and assessed, including, as appropriate, through follow up consultation and research. This may appropriately occur in the first quarter of each calendar year. This activity would signal the commencement of a cycle of maintenance activities.

If it can be demonstrated that a problem exists and that regulatory change offers the potential to effectively address the identified problem, then the DOT will commence the development of Amending Regulations and an associated RIS.

It should noted that the adoption of this regimented approach to maintenance by DOT does not preclude (in any way) its capacity to develop 'urgent amendments' in response to, for example, an incident that identifies a problem or deficiency with existing regulations. The DOT will always maintain a capacity to consider and progress such changes as need dictates and as directed by the Government.

Evaluation

At the time of implementation it is necessary to identify and put in place arrangements to support the collection of information necessary to support an evaluation of the effectiveness of the new or amended regulations in the future.

However, the collection of information can be costly and can result in significant regulatory burden if the onus is on regulated parties to collect and report information to support future evaluation activities. Accordingly, it is necessary to balance the desire and demand for information with the foreseeable costs of collection and supply.

As noted in the Implementation section, for the purpose of the proposed regulations, it has been determined that it will be necessary to collect:

- information and data relating to or supplied by bus operators (both registered and accredited) as follows:
    - information supplied through the application process, including information on the roadworthiness of buses,
    - data collected during scheduled audits and/or compliance activities,
    - data collected from licensed bus testers through the annual safety inspection regime,
    - data collected following bus incidents (note that all bus operators will be required to report bus incidents as defined in the BSR to PTSV),
    - information received through PTSV's public complaints process.

Post implementation reviews are needed to determine whether reforms have been successful (and to what extent) in meeting their objectives. The timing of such reviews is vitally important. If undertaken too early, implementation may not have been completed, or, there may be insufficient data to measure changes in outcomes and reach firm conclusions about merits. If undertaken too late, the opportunity to make refinements and improve outcomes is the interim period is forgone.

The DOT proposes to undertake a post implementation review 5 years after the commencement of the proposed regulations. The adoption of this period generally assumes that effective implementation of new requirements takes 1 to 2 years and that 2 to 3 years of data post implementation is needed to validly measure the changes in impact that can reasonably be attributed to the regulatory reform.

A further reason for undertaking such an evaluation and review within this timeframe is to make sure that arrangements have been put in place to effectively measure outcomes and changes in risk levels and other variables that would normally be expected to impact on outcomes so that when the major period reviews is undertaken, there is a firm basis on which to make decisions about the retention, replacement or omission of regulations that have previously been in place.

Finally, as outlined above, the Department will collect data to enable an assessment of the appropriateness of the current fee structure to be assessed as part of its five-yearly review of the Regulations. This will include conducting an analysis of how the extent of regulatory activities undertaken varies across different groups of operators and operator sizes.

Review

Victorian Regulations are made to 'sunset' (expire) on the 10 year anniversary of their making. This convention forces all departments responsible for regulations made under

primary statutes to commence and complete major periodic reviews of regulations every 10 years.

This convention provides a satisfactory mechanism for ensuring that regulations are regularly reviewed to ensure they remain relevant, effective and economically efficient.

11. Regulatory Change Measurement Assessment

Under the Victorian government's revised Reducing the Regulatory Burden Initiative, announced in 2009[43], material changes in regulatory costs imposed on business, the not-for-profit sector, the operation of government services and some costs incurred by private individuals by new or amended regulation must be assessed through the preparation of two separate documents: a Business Impact Assessment or Regulatory Impact Statement and a Regulatory Change Measurement. Both documents are required to assess all regulatory costs - i.e. administrative burdens, substantive compliance costsand delay costs. However, while the BIA/RIS requires a benefit/cost analysis to be completed and a range of alternative policy options to be assessed, the RCM simply requires changes in regulatory costs to be measured.

Moreover, a specific methodology is required to be employed in the RCM. This differs from that used in BIA/RIS in some ways. Notably, it provides a greater emphasis on the incidence of the identified costs, highlights the issue of delay costs and, importantly, is based on the measurement of cost changes in *annual* terms, rather than the calculation of costs on a present value basis over the expected life of the regulations.

An RCM report must be employed where there is prima facie evidence that changes in regulatory costs are likely to be material. A regulatory cost change is material if:

the change in administrative burden experienced by the affected sector is greater than $250,000 per annum; or

the change in the sum of compliance costs (including administrative and substantive compliance costs) and costs of delays, experienced by the affected population, is greater than $500,000 per annum.

Changes in administrative burdens

The analysis developed as part of this RIS indicates that the adoption of the proposed regulations, in the context of the implementation of the Act, will lead to reductions in existing administrative burdens in some areas and increases in existing administrative burdens in others. The following is drawn from the cost analysis contained in section 5, above, and summarises the identifiable changes in administrative burdens.

Accredited operators

All the costs associated with applying for and renewing an accredited operator status, including the costs of documenting MMS and MIS, are regarded as constituting administrative burdens. The requirements of the proposed regulations mirror those of the

[43] The revised RRBI was announced in the context of theTreasurer's 2008-09 Progress Report on the Reducing the Regulatory Burden (RRB) initiative, available at www.dtf.vic.gov.au/betterregulation. The new requirements are set out in the *Victorian Regulatory Change Measurement Manual.* Department of Treasury and Finance, effective 1 January 2010. See: http://www.treasury.vic.gov.au/CA25713E0002EF43/WebObj/VictorianRegulatoryChangeMeasurementManual/$File/Victorian%20Regulatory%20Change%20Measurement%20Manual.pdf .

existing regulations in this regard. However, the aggregate costs imposed via the accreditation provisions of the proposed regulations are expected to be significantly lower than those of the existing regulations as a result the following two changes:

- the number of operators required to be accredited is expected to fall by approximately 500; and
- operators will no longer be required to renew their accreditation five yearly intervals.

As a result of the removal of the accreditation requirement from non-commercial operators, 491 fewer operators will be required to be accredited. Given that the current regulatory arrangements required accreditation be renewed five yearly, this means that an average of 100 fewer accreditation renewals will occur per annum over each of the 10 years during which the proposed regulations are expected to be in operation. The average cost of renewing accreditation was estimated above that $608.18. Therefore, administrative cost savings of $60,818 per annum are expected to result from this regulatory change.

In addition, new entrants to the bus industry who are non-commercial operators will not be required to be accredited. As indicated above, current entry rates are approximately 6.5%. Given that there are currently approximately 500 non-commercial operators in the industry, this implies that the number of initial accreditation applications will be reduced by around 32.5 per annum on average. The cost of an initial accreditation application was estimated at $6370.11. Thus, there will be a reduction in administrative burdens of time in $207,028.58 per annum as a result of this change.

Taking these two factors together, administrative cost reductions of $267,846.58 per annum are expected, equivalent to $2.2 million in present value terms over 10 years.

Registered operators

It is expected that approximately 3590 non-commercial operators will need to become registered at the time of the implementation of the Act and the proposed regulations. The costs involved were estimated in section 5.7, above. Given that the registration process has deliberately been designed to be a simple one, it has been estimated that only a half-hour would be required to complete and launch the necessary application. On this basis, the one-off cost of the registration process was estimated at:

$51.05/2 x 3,590 = $91,635

In addition, it is assumed that entry by non-commercial operators will be equal to approximately 6.5%, in line with current observations. Thus, the annual administrative costs associated with registration applications are estimated at:

$91,635 x 6.5% = $5956

The total additional administrative costs to industry associated with the registration process are therefore estimated at approximately $132,315.34 in present value terms over 10 years.

Net change in administrative burdens

The net change in the administrative burdens as a result of the replacement of the existing regulatory arrangements with the proposed Act and regulations is therefore a reduction in administrative costs of $267,000 per annum on average. Thus, the change in administrative costs associate with the proposed regulations is greater than the materiality threshold of $250,000 per annum.

Total regulatory costs

As noted above, an RCM is also required if the sum of all changes in regulatory costs exceeds $500,000 per annum. As indicated in Section 5, above, the expected change in existing total regulatory costs is negative. That is, there is expected to be a slight increase in regulatory costs of around$0.6 million in present value terms over 10 years. This is equivalent to an average increase in regulatory costs of less than $0.1 million per annum.

Conclusion

Given the above, it is proposed to complete an RCM assessment in respect of the proposed regulations. This assessment has been commenced and will be completed separately from the current RIS. It is expected to be published on the DoT website prior to the commencement of the proposed regulations.

12. Consultation

As discussed above, the proposed regulations constitute an integral part of an entirely new legislative structure governing bus safety being adopted in Victoria. That structure, and the Act itself, is part of a much larger reform program aimed at the renewal of the entire suite of Victorian transport policy and legislation. As such, the development of the regulations has regulations benefited from, and been informed by, the extensive process of consultation conducted during the development of this new legislative structure, especially relating to the Act.

Informal consultation with industry in relation to bus safety legislative reform commenced in early 2005. A discussion paper was developed between late 2006 and early 2008, with the assistance of consultants Jaguar Consulting and DLA Phillips Fox. The development of the discussion paper was also informed by the results of a number of workshops conducted over this period, in which a wide variety of stakeholders participated. These stakeholders included the Bus Association of Victoria, the Transport Workers Union, the hire car sector, the community sector (including both community groups, the Municipal Association of Victoria and the Department of Human Services) and relevant Victorian government agencies.

A wide range of community organisations was also consulted, as well as representative groups. These included Victorian Council of Social Service, the Victorian Community Transport Association (VCTA who represent 35 Local council and community groups), and the Municipal Association of Victoria (MAV), VCOSS and VCTA, Transaccess, South West Community Transport Program, Uniting Care Ballarat, Red Cross, and a number of local councils who deliver community transport.

The results of the consultation indicated that there was general support for all substantive aspects of the proposed legislation, including the expansion of the scope of the legislation to include the minibus sector.

Discussion Paper

The Department of Transport discussion paper, "Improving Bus Safety in Victoria", was released on 12 May 2008, as was a summary version. These materials were made available on the DoT website, as well as being sent directly to key stakeholders, including the BAV and the TWU, as well as bus operators in a range of sectors, including the hire car sector, the hotel sector, the schools sector (both public and private), the tourism sector and the community bus sector. It was also sent to a range of other interested parties, including the Municipal Association Victoria, WorkSafe, the Department of Justice, the National Transport Commission and interstate bus safety regulators.

The paper contained a thorough analysis of bus safety issues and various regulatory approaches and included a specific set of proposals for the content of a Bus Safety Bill. The paper requested comment on this proposal, with comments being received until 20 June 2008.

The consultation undertaken generally revealed a high level of support for the direction of reform.

Further consultation was undertaken during the course of the development of the proposed Bus Safety Regulations and the preparation of this RIS. This was inevitably focused on the specific issues dealt with via the regulations themselves. The following stakeholders were consulted in this context:

- Bus Association Victoria (BusVic)
- Public Transport Safety Victoria (PTSV)
- Public Transport Division, Department of Transport, Victoria (PTD)
- VicRoads
- Victorian Taxi Directorate (VTD)
- Department of Justice (DoJ)
- Worksafe Victoria

In addition, a survey seeking information on the costs involved in complying with the existing regulations, together with views on the likely cost impact of the proposed regulatory changes, was sent to a sample of approximately 100 bus operators, as noted in Section 5.1.

Stakeholders remain generally supportive of the proposed regulations. The major views expressed by stakeholders are summarised below.

Bus Association Victoria

BusVic has, to date, expressed opposition to the establishment of the registered operator category, arguing that all operators of bus services should continue to be accredited as, in its view, this is essential to ensure equivalent safety standards are maintained in all sectors of the industry. They believe that the regulatory burden on non-commercial operators could be reduced, within this context, by requiring them to undertake a short, low cost on-line 'Introduction to Bus Safety' course, as a substitute for the current requirement in respect of accredited operators.

However, BusVic now appears to accept the policy basis for the creation of the category of registered operators and its application to non-commercial operators.

In relation to training requirements, it can also be noted that the new accreditation scheme established by the Act will be slightly less burdensome than the current requirements in that undertaking a training course will no longer be a mandatory prerequisite. In this context, it is not considered to be consistent with the logic underlying the creation of the registered operator category to adopt a more onerous requirement for this group (i.e. the on-line course suggested by BusVic) than is applied to accredited operators where safety risks are believed to be higher. However, the regulator does have power to approve training courses and the content of any such courses and PTSV has these matters under consideration.

Bus Vic continues to express strong support for annual safety inspections to be required for buses operated by registered operators

The RIS supports this approach and the settled regulations have been drafted on this basis. However, the matter is specifically highlighted in the RIS and stakeholder comment is particularly invited on this issue (see page 71). Any comments received will be evaluated at the end of the public consultation period.

Public Transport Safety Victoria

PTSV, as the bus safety regulator, was involved in the development of the proposed regulations by the Department of Transport and is supportive of them. In particular, PTSV believe that annual inspections for registered operators are an essential component of an effective vehicle safety regime. PTSV also argued for the adoption of the current definition of "school bus service" and believe that it facilitates a more appropriate targeting of the regulation of this sector.

Public Transport Division, Department of Transport

PTD is generally supportive of the proposed regulations. In PTD's view, the safety duties imposed by the BSA are the most significant element of the new bus safety regime.

VicRoads

VicRoads are supportive of the proposed regulations, particularly the clarification of the safety inspection regime and the role of licensed bus testers.

Victorian Taxi Directorate

The VTD administers the Commercial Passenger Vehicle licensing scheme under which approximately 200 minibuses are currently regulated. These minibuses will transfer to the new scheme. Additionally, the VTD administers and will continue to administer accreditation of drivers. The VTD is supportive of the proposed regulations. The primary concern of the VTD is to facilitate a smooth transition from the commercial passenger vehicle licensing regime to the bus safety regime for those vehicles affected. The VTD is also concerned to maintain an effective driver accreditation regime.

Department of Justice

DoJ is supportive of the proposed regulations. Proposed regulation 17, which regulates the disclosure of records, was included at the request of DoJ.

Future consultation process

Consultation comments on this RIS will be accepted for a period of 45 days, in accordance with Victorian Government policy on best practice regulatory consultation. This significantly exceeds the statutory minimum of 28 days specified in the Subordinate Legislation Act 1994. Public comment is invited up to the date specified in this document.

A detailed communications and consultation strategy will be implemented during the consultation period and submissions sought. All submissions and comments received will be assessed and the regulations reviewed where necessary. DOT will respond directly in respect of all submissions.

13. Statement of compliance with National Competition Policy

The National Competition Policy Agreements ("NCPA") set out specific requirements with regard to all new legislation adopted by jurisdictions that are party to the agreements. Clause 5(1) of the Competition Principles Agreement sets out the basic principle that must be applied to both existing legislation, under the legislative review process, and to proposed legislation:

> *The guiding principle is that legislation (including Acts, enactments, Ordinances or Regulations) should not restrict competition unless it can be demonstrated that:*
>
> *(a) The benefits of the restriction to the community as a whole outweigh the costs; and*
> *(b) The objectives of the regulation can only be achieved by restricting competition.*

Clause 5(5) provides a specific obligation on parties to the agreement with regard to newly proposed legislation:

> *Each party will require proposals for new legislation that restricts competition to be accompanied by evidence that the restriction is consistent with the principle set out in sub-clause (1).*[44]

Accordingly, every regulatory impact statement must include a section providing evidence that the proposed regulatory instrument is consistent with these NCP obligations. The recently released OECD Competition Assessment Toolkit[45] provides a checklist for identifying potentially significant negative impact on competition in the RIA context. This is based on the following three questions:

- Does the proposed regulation limit the number or range of suppliers?
- Does the proposed regulation limit the ability of suppliers to compete?
- Does the proposed regulation limit the incentives for suppliers to compete vigorously?

According to the OECD, if all three of these questions can be answered in the negative, it is unlikely that the proposed regulations will have any significant negative impact on competition.

The proposed regulations do not act directly in any of the above ways. Therefore, it can be concluded that they are unlikely to have any significant negative impact on competition. The regulations do create barriers to entry, in that they set out a number of requirements that must be met by all operators seeking accreditation. However, as discussed above, these requirements have been set at the minimum level that is consistent with the maintenance of adequate safety standards. The success of bus safety regulation in contributing to the steady

[44] Clause 5, Competition Principles Agreement, 11 April 1995 accessed at www.ncc.gov.au/pdf/PIAg-001.pdf
[45] See *Integrating Competition Assessment into Regulatory Impact Analysis.* OECD, Paris, 2007. (DAF/COMP(2007)8).

improvement in bus safety standards observed in recent times indicates that the benefits attained through the impositions of these barriers to entry justify their costs. Moreover, it is not possible to conceive of other means of achieving equivalent safety benefits that are less restrictive of competition, since the regulatory provisions in question are all directly safety-related.

Moreover, the proposed regulations implement the provisions of the Act which establish for the first time the category of registered operator. The establishment of the registration mechanism will have the effect of providing a less onerous regulatory option for non-commercial operators who are required to be accredited under the current legislative arrangements. The availability of a less demanding regulatory framework is expected to make it more feasible for non-commercial operators to meet their own needs for bus services, rather than being reliant upon contracting the services of commercial operators. To this extent, the proposed regulations (and the Act which they serve to operationalise) can be seen as more supportive of competition than the current regulatory arrangements. Conversely, persons who only operate 10-12 seat buses will be subject to regulation for the first time. However, the extent of the regulatory requirements that will be faced by non-commercial operators in this category has been demonstrated above to be limited and and proportionate and is not expected to have any material impact in reducing competition.

In sum, it has been concluded that the proposed regulations are fully compliant with the requirements of the National Competition Policy.

Appendix 1: Proposed Bus Safety Regulations 2010

Appendix 2: Bus Operator Questionnaire

Department of Transport - Bus Operator Questionnaire

The proposed Bus Safety Regulations 2010 will be made under the authority of the new Bus Safety Act 2009 and will replace the safety related provisions of the current Transport (Passenger Vehicles) Regulations and Public Transport Competition Regulations.

A Regulatory Impact Statement (RIS) is being prepared in respect of the proposed regulations and will subsequently be released for a period of public consultation. We are seeking your assistance in developing estimates of the expected costs of compliance with the proposed regulations for incorporation into the RIS. Please note that only average cost figures will be published and that no information provided by individual respondents will be published or made available to any other party.

The following questionnaire asks you to estimate the costs of compliance with the proposed regulations based on your experience of complying with the existing regulatory requirements. This reflects the fact that most of the substantive elements of the proposed regulations are similar to those currently in place. A draft copy of the proposed regulations is attached to the questionnaire for your reference.

Where compliance activities are undertaken internally (i.e. by you or your staff), please estimate the *amount of staff time* required to complete the task[46]. However, where cash costs are incurred (e.g. in purchasing equipment or professional services), we ask you to estimate these dollar costs.

If you have any queries in relation to the questionnaire, please contact Rex Deighton-Smith, Director, Jaguar Consulting on 9500 0212 or 0402 129 121 or by e-mail at jaguar2@tpg.com.au.

When you have completed the questionnaire, please forward it to Mr Deighton-Smith at jaguar2@tpg.com.au, or to PO Box 522, Malvern, Victoria, 3144. Given the need to finalise the RIS as soon as possible, we ask that you please submit the questionnaire **by Friday 30 October 2009.**

[46] The RIS will multiply the average time estimates by an hourly rate comprising average weekly earnings plus a percentage for overhead to estimate total costs. This method has been specified by the Government as a standardised approach required to be used by all regulatory agencies. If you believe that the average wage cost of staff involved significantly exceeds average weekly earnings, please indicate this in your response.

Part 1: Operator details

Please identify the category of accreditation currently held and describe the nature of your bus operations.

Please indicate the number of buses you currently operate, noting whether these are large, medium or small buses.

Please provide contact details for the person primarily responsible for completing this questionnaire, to enable us to ask follow-up or clarifying questions if necessary.

Part 2: Estimates of the costs of the regulations

Regulatory requirement	**Person hours**	**Cash costs**
Renewal of accreditation Please estimate the total costs (both staff time and any other expenses incurred) in completing the process of renewing operator accreditation. *[Include the costs of amassing relevant documentation, submitting materials to DoT, dealing with departmental queries and providing supplementary materials, etc. Please estimate this cost based on your historical experience if possible.)*		

Initial accreditation *If possible, please estimate the cost of complying with the initial accreditation requirements contained in the regulations*[47]		
Management Information System Please estimate the cost of initially developing a Management Information System as required by the regulations		
Please estimate the annual cost of maintaining the MIS.		
Maintenance Management System Please estimate the cost of initially developing a Maintenance Management System as required by the regulations		
Please estimate the annual cost of maintaining the MMS.		
Annual inspections Please indicate the amount of staff time involved in complying with annual bus inspection requirements (if possible, provide this estimate on a "per bus" basis).Please also indicate the fee per bus that you pay in respect of annual inspections as required by the regulations.		
Record retention Please estimate the costs incurred in complying with the record retention requirements of the regulations.		
Reporting and investigation If you have been required to investigate a bus incident, please estimate the staff time and any other costs incurred in reporting the incident and undertaking this investigation.		

[47] If you are unable to estimate these directly, please estimate whether they are likely to exceed the costs of renewal applications, and by what percentage.

Other

Please indicate the extent to which the estimated costs associated with the Management Information System and the Maintenance Management System requirements exceed those that would be incurred in the absence of the bus safety legislation/regulations for commercial reasons.

Please provide any additional comments you believe relevant to the issue of regulatory compliance costs.

Appendix 2: Comparison of existing and proposed regulations

The Bus Safety Act 2009 (**BSA**) and the Bus Safety Regulations 2010 (**BSR**) will replace a regime currently comprising elements of the Public Transport Competition Act 1995 (**PTCA**), the Public Transport Competition Regulations 1999 (**PTCR**), the Transport (Passenger Vehicles) Regulations 2005 (**TPVR**) and conditions on operator accreditation imposed by the Safety Director pursuant to s 10 (1)(c) of the PTCA.

	Matter	Current regime	Proposed regulations	Impact
1.	Definition of bus	• Bus defined to be: "a motor vehicle having more than the prescribed number of seating positions" – PTCA s 3(1). • Prescribed seating number defined to be: "12, including the driver's seating position" – PTCR r 4.	No regulations – definition of bus incorporated into BSA s 3: • A motor vehicle built with 10 or more seats including the driver and built to comply with the requirements specified in the Australian Design Rules for a passenger omnibus.	• Extends coverage of bus safety regime to minibuses. • Not attributable to BSR.
2.	Safety duties	• Statutory duties under OHS legislation. • Common law duty of care.	No regulations – safety duties imposed by BSA: • Operator of a bus service – s 15 • Procurer of a bus service – s 16 • Bus safety worker – s 17 • Persons who design, construct, install, modify, maintain or determine the location of bus stopping points or bus stop infrastructure, or engages another person to do those things – s 18.	• Provides for more flexible compliance and enforcement strategies. • Codifies common law duties. • Not attributable to BSR.
3.	Requirement to be accredited	PTCA requires operators of the following services to accredited: • Road transport passenger services (commercial bus services) • Courtesy bus services • Hire and drive bus services • Private bus services.	No regulations – BSA narrows requirement for accreditation to the following services: • Commercial bus services • Local bus services The following services no longer require accreditation: • Non-commercial courtesy bus services • Hire and drive bus services • Community and private bus services.	• Narrows scope of requirement to be accredited. • Not attributable to BSR.
4.	Purpose of accreditation	• Under the PTCA, the purpose of accreditation is to ensure safety, quality of service and efficiency, and to increase competition – s 6.	No regulations – under the BSA, the purpose of accreditation is to ensure safety. Non-safety matters are not regulated under the BSA. Some regulation of non-safety matters remains in the TPVR.	• Narrows scope of accreditation to pure safety matters.

		• Pursuant to this purpose, PTCR r 9 imposes a number of mandatory conditions on accreditation that regulate matters other than safety, including scheduling, ticketing information and misrepresentation.		• Not attributable to BSR.
5.	Duration and renewal of accreditation	• PTCA s 11 provides that accreditation is valid for a prescribed period. • PTCR r 11 prescribes 5 years as the period for which accreditation is valid. • PTCA ss 15 -16 provides for renewal of accreditation upon application. • PTCR r 12 requires an applicant for renewal of accreditation to provide documentary evidence of competence and capacity to operate the relevant service.	No regulations – BSA provides for perpetual accreditation.	• Removes burden imposed by requirement to renew accreditation. • Not attributable to BSR.
6.	Application for accreditation – things to accompany application	PTCR r 8 requires the following to accompany an application for accreditation: • completed application details • signed statutory declaration • application fee **or** completed exemption form • signed declaration for disqualifying offences • national criminal record check for applicant or nominated manager • proof of completion of transport management course • copy of company certificate, or certificate of incorporation, or constituting order for schools, together with a current list of directors or office bearers • copy of current bus inspection certificate for buses to be operated • copy of management information system • copy of maintenance management system	BSR r 14 requires the following to accompany an application for accreditation: • completed application details • where the applicant is not a natural person, documentary evidence of the applicant's existence and the names of all office holders or equivalents • copy of a current certificate of roadworthiness for each bus to be used in providing the service (replaces requirement for bus inspection certificate – no more onerous.) • dates of all previous registrations or accreditations held by the applicant in relation to the operation of the bus service • copy of management information system • copy of maintenance management system • if the applicant or a responsible person has completed an approved training course, documentary evidence of that completion • evidence that shows whether or not the applicant (or each relevant person) has been found guilty of a tier 1 offence, a tier 2 offence or a tier 3 offence • if required, documentary evidence that the applicant is accredited in another State of Territory to operate a similar type of service.	• Clarifies and incorporates into regulations conditions of accreditation previously imposed by Safety Director pursuant to s 10 (1)(c) PTCA • Removes mandatory requirement for completion of an approved training course.
7.	Fee to	PTCR r 7, Item 1 Sch 1:	BSR r 12, Item 1 Sch 1:	• 2nd tier fees removed due

	accompany application for accreditation	• Courtesy, hire and drive and private service – 23.5 fee units. • Road transport passenger service (bus services conducted for hire and reward) – 40 fee units.	• Commercial bus service and local bus service – 40 fee units **BSA s 3 definition of commercial bus service excludes non-commercial courtesy, hire and drive and private and community bus services. These services do not require accreditation.*	to consolidation of categories of services requiring accreditation. • Burden reduced for non-commercial courtesy, hire and drive and private and community bus services. • Not attributable to BSR.
8.	Annual accreditation fee	PTCR r 10, Item 2 Sch 2: • Courtesy, hire and drive and private service: (3·5 fee units × (B – 1)) + 13·5 fee units—where B is the number of buses proposed to be operated by the service. • Road transport passenger service (bus services conducted for hire and reward): (5·5 fee units × (B – 1)) + 20 fee units—where B is the number of buses proposed to be operated by the service.	BSR r 13, Item 2 Sch 1: • Commercial bus service and local bus service: (5·5 fee units × (B – 1)) + 20 fee units—where B is the number of buses proposed to be operated by the service. **BSA s 3 definition of commercial bus service excludes non-commercial courtesy, hire and drive and private and community bus services. These services do not require accreditation.*	See above.
9.	Requirement to be registered	Nil – registration is a new requirement imposed by the BSA.	• No regulations – requirement is imposed by BSA • Operators of bus services who are not required to be accredited are required to be registered. • Registration will apply to a sector of the market previously unregulated – operators of non-commercial services using 10-12 seat buses. • Registration will also apply to the following services previously required to be accredited: – Non-commercial courtesy bus services – Hire and drive bus services – Community and private bus services • Registration will also apply to commercial services using exclusively 10-12 seat buses previously licensed under the Commercial Passenger Vehicle licensing regime administered by the Victorian Taxi Directorate.	• Registered operators will be required to comply with the BSA. • Not attributable to BSR.
10.	Vehicle safety inspections	PTCR r 9 (q) requires an accredited operator to ensure that each bus used to provide the bus service has undergone a safety inspection in the last 12 months.	• BSA s 19 (1) requires accredited operators to ensure that each bus used to provide the bus service undergoes an inspection annually or at prescribed intervals. • BSA s 19 (2) requires registered operators to ensure that each bus used to provide the bus service undergoes an inspection in accordance with the regulations.	• Continues requirement for accredited operators to ensure buses undergo annual safety inspections. • Imposes new requirement that registered operators ensure buses undergo

			• BSR r 24 provides that safety inspections must be conducted annually by licensed bus testers. The Safety Director may exempt an operator from the requirement to undergo an annual safety inspection if satisfied that a bus has undergone a satisfactory safety inspection outside Victoria.	annual safety inspections.
11.	Management Information System (MIS) and Maintenance Management System (MMS)	• PTCR r 9 (m) requires an accredited person to establish and maintain an MIS that includes: – driver monitoring program that includes record of complaints against the driver and action taken by the operator – a fleet register – accident register – emergency management plan – mobility enhancement strategy – public complaints register. • PTCR r 9 (p) requires an accredited person to establish and maintain an MMS in the form and manner approved by the Safety Director.	• BSR r 18 requires an accredited operator to establish an MIS in the manner and form approved by the Safety Director. • BSR r 19 requires an accredited operator to establish an MMS in the manner and form approved by the Safety Director.	No change.
12.	Record – keeping	• TPVR r 19 requires an accredited person to keep a record of all drivers' details and accreditation for 3 years. • PTCR r 9 requires an accredited person to: – retain all books and records required to demonstrate compliance with the conditions of accreditation for 2 years – make those books and records available for inspection on demand – assist in any audit performed – establish and maintain procedures to monitor and record driver compliance with the RSA and the RSVR.	• BSR r 16 requires accredited operators to keep the following records: – drivers' details and accreditation – any documents required to demonstrate compliance with the conditions of accreditation – all documents produced as part of the management information system or maintenance management system – any documents as part of the annual audit of bus services operations – certificates of roadworthiness in respect of each bus operated. • Registered operators are not required to keep records.	No substantive increase in burden.
13.	Auditing by Safety Director	PTCR r 9(g) require an accredited operator to permit and assist persons authorised by the Safety Director, to audit and inspect the books and records of the accredited person, if the Safety Director determines that an audit should be performed	No regulations – BSA s 20 grants the Safety Director power to conduct, or cause to be conducted, safety audits to determine whether the requirements of the Act are being complied with.	No substantive change in burden.

		for the purpose of determining whether all or some of the conditions of accreditation are being complied with.		
14.	Internal auditing	An accredited operator is required to undertake an annual internal audit of their records, systems and procedures.* *This requirement is imposed by the Safety Director as a condition of accreditation pursuant to s 10 (1)(c) PTCA.	BSR 15 (b)(i) requires accredited operators to undertake an annual audit of their management information system and maintenance management system.	Incorporates into regulation a condition previously imposed by the Safety Director pursuant to s 10 (1)(c) PTCA.
15.	Incident reporting and investigation	• TPVR r 9(i) requires an accredited person to provide a report in the form and manner requested by the Safety Director, about any aspect of the operation of a road transport passenger service relevant to the conditions of accreditation imposed by or under the Act • Pursuant to s 10(1)(c) PTCA, the Safety Director requires reporting of "notifiable incidents": • A notifiable incident means any incident which: – results in the death of a person – results in any person sustaining a serious injury* – is a collision that results in significant damage to any property or equipment (of a value greater than $15,000) – a driver in charge of a bus operated by the accredited person tests positive for exceeding prescribed quantities of drugs or alcohol whether in connection with an accident or not, if known – is, in the reasonable opinion of the operator, likely to impact on public safety. *A serious injury means any injury caused as a result of a notifiable incident, which requires immediate treatment at a hospital or other medical establishment. • The accredited person must also provide: – phone reports of notifiable incidents as soon as practicable, and – written follow up reports of these incidents.	• BSA s 65 requires bus operators to notify the Safety Director of prescribed incidents in accordance with the regulations. • BSR r 25 prescribes "bus incidents" as prescribed incidents. • BSR r 3 defines "bus incident" as follows: • ***bus incident***, in relation to a bus operated by an accredited bus operator or a registered bus operator, means— • a circumstance, act or omission including— – a collision with any person, vehicle, infrastructure, obstruction or object; – an implosion, explosion or fire; – any mechanical failure; – divergence from the highway; – a failure to comply with applicable legislative requirements, vehicle specifications, bus standards or codes of practice— • where the circumstance, act or omission resulted in, or had the potential to result in the death of, or serious injury to, any person, a loss of control of the bus, or significant damage to property; or • an accident or incident that results in a person requiring immediate treatment as an in-patient in a hospital; or • a circumstance where the driver of the bus is in contravention of the bus operator's alcohol and drug management policy; • BSR r 26 requires a bus operator to undertake an investigation into a bus incident if directed to do so by the Safety Director and to provide an investigation report within a specified period.	• Narrows reporting requirement to incidents, rather than "any aspect of a road transport passenger service". • Incorporates into regulation a condition previously imposed by the Safety Director pursuant to s 10 (1)(c) PTCA.
16.	Bus operations - maximum	T(PV)R r 34 prohibits the driver of a bus from carrying more than the number of passengers specified by a licensed tester.	BSR r 5 requires the operator of a bus service to determine the maximum number of passengers that may safely be carried on a bus, maintain a	• Serves as a standard to supplement safety duties, rather than a stand-alone

	passenger numbers		record of that number and ensure that drivers are aware of it.	offence. • Extends responsibility to operators.
17.	Bus operations – bus standards	T(PV)R r 20(2) requires the operator of a bus service to ensure that buses comply with applicable bus standards as set out in Schedules 2 & 3 T(PV)R.	BSR r 6 requires the operator of a bus service to comply with applicable bus standards as set out in VicRoads Vehicle Standards Information sheet 30.	No substantive change in burden.
18.	Bus operations – devices for school buses	T(PV)R r 31: • Requires the operator of a bus used to carry school children, teachers and supervisors exclusively to ensure that either lights complying with the Road Safety (Vehicles) Regulations or a hazard warning device are fitted. • Requires the operator of a bus used to carry school children, teachers and supervisors exclusively to ensure that lights or devices required to be fitted operate when the bus is picking up or setting down passengers.	BSR r 7: • Incorporates definition of "school bus service", which has a slightly different scope than T(PV)R provision: – Applies to buses providing a service used primarily for the purpose of transporting children to and from school (not for excursions etc); – Buses used for a school bus service may be used by general public • Requires the operator of a bus used to carry school children, teachers and supervisors exclusively to ensure that either lights complying with the Road Safety (Vehicles) Regulations or a hazard warning device are fitted. • Requires the operator of a bus used to carry school children, teachers and supervisors exclusively to ensure that lights or devices required to be fitted operate when the bus is picking up or setting down passengers. • Allows for mechanical error of lights or device but requires the driver of a bus where mechanical error has occurred to inform operator and cease operating as soon as reasonably practicable (i.e. run may be completed).	• Clarifies requirement to fit lights, signs and devices. • Narrows scope of application to buses used for transportation to and from school.
19.	Signage and number plates	• T(PV)R 30 requires a bus operator to attach any number plates, signs, symbols, notices or labels required, approved and in the manner specified by VicRoads, the Secretary, the Director or the Safety Director.	• BSR 9 requires an accredited bus operator to display any signs required by the Safety Director (no requirements for registered operators). • BSR 10 requires an accredited bus operator to display accredited bus operator number plates on each of the operator's buses and prohibits persons other than accredited bus operators from displaying accredited bus operator number plates.	No substantive change in burden.
20.	Consumption of alcohol or drugs by drivers	• T(PV)R r 35 prohibits a driver from drinking during a work shift.	BSR r 11 prohibits a driver from having alcohol or drugs present in his or her blood or breath immediately before or while driving a bus. **BSA s 57 requires all bus operators to have an alcohol and drug management policy which stipulates that drivers are not to have alcohol or*	• Requires bus drivers to have zero blood alcohol or drug content. • Gives effect to BSA s 57.

			drugs in their breath immediately before or while driving a bus.	
21.	Ticketing, passenger information, service standards, scheduling, fares	• PTCR r 9 imposes mandatory conditions of accreditation regulating: – the availability of information to intending passengers – the manner and form of tickets to be used – representations as to the quality and comfort of vehicles available for hire – the adequacy of notice to passengers of a failure to run pre-booked services. • TPVR rr 36 – 41 imposes obligations on drivers in relation to: – vehicle operations – dress and appearance – ticketing – lost property • TPVR rr 42 – 50 impose various obligations on accredited operators in relation to fares, ticketing and passenger information.	No regulations under the BSR – not safety related. Regulations in the TPVR to be reviewed separately prior to commencement of BSA and BSR.	• Narrows scope of accreditation to pure safety matters. • Not attributable to BSR.
22.	Passenger conduct	• TPVR Pt 5, Dv 4 regulates passenger behaviour.	Bus-related passenger behaviour regulations to be consolidated into the Transport (Conduct) Regulations 2005.	No substantive change.